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**ECONOMIC REVIVAL: THE KEY TO THE
DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA'S
SURVIVAL**

by

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March 2014

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REPUBLIC OF KOREA'S SURVIVAL**

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ABSTRACT

The Democratic People's Republic of Korea (DPRK) is using all avenues to include nuclear capability for its regime survival, which is threatening the peace within the Northeast Asia region. The DPRK is perceived as an outcast by the international community and has few means to legitimize its regime other than acts of terrorism and an illicit economy that sustains regime survival despite international sanctions. Past economic policies and reforms have failed with major social consequences. Continued economic downfall will lead to instability of the regime, causing international disorder and suffering to DPRK citizens. A strong economy is a major factor in maintaining stability within a state, and if citizens are able to meet their basic needs, elites are in better positions to maintain their power. The DPRK, as a hard-line authoritarian regime, instead maintains power through repression and an informal economy. The fall of the Soviet Union, the DPRK's biggest donor, led to a halt in foreign aid. To make matters worse, monsoon events and mismanagement of the economy led to deadly famines. For the sake of the regime's survival and regional stability, the DPRK has to change its perspective on its economic policies.

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LIST OF ACRONYMS AND ABBREVIATIONS

DPRK	Democratic People's Republic of Korea
GDP	gross domestic product
MOEA	Ministry of Economic Affairs
MOF	Ministry of Finance
OECD	Organization for Economic Cooperation and Development
PDS	production distribution system
PRC	People's Republic of China
R&D	research and development
ROK	Republic of Korea
SEZ	special economic zone
SME	small- and medium-sized enterprises
UN	United Nations
WTO	World Trade Organization

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I. INTRODUCTION

A. PURPOSE

The death of its beloved leader, Kim Jong-il, of a massive heart attack on 17 December 2011 was marked as a tragic day in the Democratic People's Republic of Korea (DPRK). The day also meant a transition in leadership to Kim Jong-il's son, Kim Jong-un, who took on the challenge of leading a destitute, pariah state after less than two years of tutelage under his father. Kim Jong-un has faced a steep curve in bringing an orderly transition as many competing factions jockey for positions. Fortunately for him, Kim Jung-un has been insulated by his family connections within the inner circle.¹

As a hard-line authoritarian regime, the DPRK maintains power through repression. The DPRK plays the nuclear card for regime survival, which adds to the instability within the region. The regime is portrayed as an outcast by the international community, which has few means to legitimize the regime, and resorts to an illicit economy to sustain the state's survival, partly to circumvent the restrictions imposed by the international sanctions. The DPRK has been so dependent upon the Soviet Union and China for resources that it has not fully developed its own capabilities. The republic's continued economic decline will only lead to instability of the regime, causing international disorder and suffering of its citizens.

A strong economy is a major factor in maintaining stability within a country. If citizens are able to fulfill their basic needs, politicians are in better positions to maintain their power. The mismanagement of the economy and ill weather led to deadly famines. For the sake of the regime survival and regional stability, the DPRK needs to make substantial changes to its economy. Although, there are no easy ways to rectify DPRK's economic troubles, there are enough proven data points in history to provide the

¹ Andrei Lankov, *The Real North Korea: Life and Politics in the Failed Stalinist Utopia* (Oxford: Oxford University Press, 2013), 133–136.

guidelines to salvage the DPRK's future. The experimentation in economic policies that brought success to both the Republic of Korea (ROK) and Taiwan will be critical to the DPRK's economic success.

The biggest question is this: How will the DPRK be able to persuade all of the stakeholders in implementing policies that go directly against its ideology? China's transition to an open-market economy may become a model for the DPRK's attempt to obtain reassurance from the inner circle and their citizens. The DPRK will have to gradually transition from state-owned enterprises to privately owned enterprises and put more emphasis on existing special economic zones (SEZ). Finally, the DPRK will have to focus on agricultural policy changes before heavy industries along with limiting free speech and communication to make the transition successful.

Past economic policies and reforms failed with major social consequences, but economic policy changes from 2002 suggest that some tweaking of past reforms will highly benefit the DPRK. The positive trend has not been fully realized due to the lag time in the execution of the changed economic policies.²

The DPRK has the capability and potential to transform from its current state. It is a republic rich in minerals and resources. In fact, Goldman Sachs reported that the mineral resources' financial potential is 140 times the size of the DPRK's current global domestic product (GDP).³ With optimal policies in effect and guidance from the international community, the DPRK can navigate challenges to become a successful growth story in East Asia.

In the short term, the DPRK will be able to survive by means of its illicit economy, but for the sake of long-term regime sustainability, new economic reforms are vital and necessary. The DPRK will have to pursue near-term pain for the sake of long-

² Bruce Cumings, "Why Did So Many Influential Americans Think North Korea Would Collapse?" (London: McFarland., 2011), 55.

³ Gooheon Kwon, *A United Korea: Reassessing North Korea Risks (Part 1)*, Global Economics Paper No: 188 (New York: Goldman Sachs, 2009), 10.

term prosperity. The DPRK's success is in the best interest of all countries taking part in the Six-Party Talks. Direct or indirect aid by the international community will be critical to the DPRK's success.

B. IMPORTANCE

The DPRK not only has become a headache to the United States, the ROK, and Japan, but also has become a burden to its close allies; China and Russia. The Six-Party Talks have come and gone without any meaningful results. The United Nations' (UN) strangulation strategy of implementing sanctions strictly pertaining to the DPRK's economy has not reined in the defiant state from committing illicit activities. The DPRK has produced nuclear weapons to legitimize its regime not only to its citizens, but the international community.

With the DPRK progressing every day in advancing its nuclear program, it is urgent and necessary for the international community to find an unorthodox approach to bring stability to the Korean Peninsula. In the past, the DPRK has implemented half-hearted economic reforms with total failure due to illogical decisions rendered by the leadership.⁴ The economic reforms were difficult to implement because of the DPRK's founding ideology of *juche* and its political and social structures. Depending on the economic conditions, the DPRK has oscillated between socialist policies and minor attempts at an open-market economy.⁵

With the implementation of the UN sanctions and international community's disapproval of DPRK's illogical actions, the regime has transitioned from a formal economy to an illicit economy. The longer the international community shuns the DPRK; the longer the regime will become only more defiant with more nuclear weapons on-hand. It is prudent and vital for the international leadership to both directly and indirectly support the DPRK's attempt at economic reform, which can potentially transition the regime to more economic transactions that are lawful. Once efficient and legitimate

⁴ Cumings, "Why Did So Many...?" 48–49.

⁵ Victor Cha, *The Impossible State: North Korea, Past and Future* (New York: HarperCollins, 2012), 37–38.

economic structures are in place, the market force will act naturally. A successful economic reform will bring legitimacy to the regime and a means for long-term survivability. Regime survivability is critical to the international community because maintaining the status quo which is in-line with most of the interested party's strategy. The stability of the regime will force the state to act in a diplomatic fashion without the need to flex its muscles through nuclear weapons. The regime will be able to continue its existence with more legitimacy, and the international community will avoid constant headaches in the future. Despite some failures from the DPRK's attempt at economic reform in 2002, the DPRK should continue and tweak its policies because it is currently reaping some of the benefits from the past attempt.⁶

C. LITERATURE REVIEW

1. The Regime Will Not Collapse

The exact state of the DPRK is misunderstood by the majority of the analysts who follow the ostracized state. Many analysts have predicted that the regime would collapse, but it has proven them wrong every time. Bruce Cumming argues that the DPRK will not collapse, and asks the question: How has the DPRK has been able to survive while other similar regimes have fallen?⁷

This is a great question, and one should acknowledge the DPRK's ability to survive even in light of two leadership changes, failed economic reforms, natural disasters, and the loss of major donors. It is important to note that even through these transitions and difficult times, the regime has still been able to function and make great leaps with its nuclear technology. The DPRK has been able to adjust its ideology along the way to cater toward any significant event that went against its interests. By keeping outside information from the public, the regime has been successful in coercing and maintaining its power.

⁶ Alexandre Mansourov, *Emergence of the Second Republic: The Kim Regime Adapts to the Changes of Modernity* (New York: ME Sharpe, 2005), 47.

⁷ Cumings, "Why did So Many..." 48–49.

One thing that has significantly changed is the structure of DPRK's economy. The once prominent state-planned economy has transformed into illicit economy, which now accounts for one-third of the annual GDP.⁸ The North Korean leadership deserves credit for endurance over the past six decades.

There is evidence to support Cumings's assessment that the regime will not collapse anytime soon. Evidence of positive economic data resulting from the 2002 economic reform will persuade Kim Jung-un to make policy decisions toward a meaningful economic reform. Although UN-mandated sanctions have not halted the regime's nuclear development efforts, eventually the sanctions tied directly to its illicit activity will strangle its coffers in the long-run. If the DPRK is unable to counter the strangulation, it will have no choice but to welcome the reform.⁹

2. Historical Economic Trends

One thing for sure is that the DPRK's economic situation has had more downs than ups. Before and after the Korean War, the DPRK was the dominant economic force compared to its southern rival. The Seoul National Unification Board published economic data to compare both the North and South Korean economy. The book's data highlights the DPRK's trading partners and its import and export products.¹⁰ It points to the DPRK's heavy reliance on the communist bloc as trading partners and shows the vast differences in economic growth between the North and South after the Korean War and with the slowing of aid from the Soviet Union. The data suggest that prior to mid-1960s that the DPRK was a model economy compared to the ROK. The numbers also show paint a picture of a developing economy that started to descend after decrease in economic aid from its major donors (Soviet Union and China). The DPRK's economic data are hard to come by so, it is vital to be able to find sources that show enough data points to make logical assumptions. The book also addresses ROK's economic climb and

⁸ Cha, *The Impossible State*, 129.

⁹ Cumings, "Why did So Many ...?" 44–47.

¹⁰ *South and North Korean Economies* (Seoul: National Unification Board, 1987), 8–12.

provides the data to show how ROK's guided economy focused on export-oriented policies while providing subsidies to fledgling industries until they had the ability to compete in the international market.¹¹

3. Policy Mistakes

The DPRK regime made many policy decisions that led to its economic downfall. In *The Impossible State*, Victor Cha provides in-depth analysis on the blunders of the DPRK leadership that resulted in a failed economy. Cha takes the mainstream conservative approach. The book details five possible reasons for the failure of past economic reforms.¹² He also explains the correlation between economic conditions and who is actually ruling at that time. The book highlights the DPRK resource curse theory of relying on too much outside aid in managing the economy. Cha puts great emphasis on how ideology drives the DPRK's regime, a view with which I disagree. Cha also implies that there is an end to the regime in the future. He distinguishes the difference between Kim Jung-un and his father. This is important because the transition in leadership marks a turning point in possible policy changes. Cha asserts that the DPRK is more open to information in the way of cell phone usage (restricted in the DPRK, with no access to international calls) and Internet usage by foreigners. These types of open communication were never possible during Kim Il-sung and Kim Jong-il's era. The DPRK has made repeated economic reform mistakes, and Cha's book helps to put into perspective why those blunders were made. With new leadership and self-determined initiatives on the DPRK's part to make the reform work, the DPRK will be less likely repeat its mistakes.¹³

In the summer of 2002, the DPRK attempted its most drastic economic measures in improving its economy.¹⁴ Alexandre Mansourov's article, "Emergence of the Second Republic," paints an optimistic picture of DPRK's future.¹⁵ Mansourov emphasizes that

¹¹Ibid.

¹² Cha, *The Impossible State*, 110.

¹³ Ibid., 110–112.

¹⁴ Mansourov, *Emergence of the Second Republic*, 47.

¹⁵ Ibid.

Kim Il-sung focused on economic reform in the face of a macroeconomic crisis. His plans seemed reasonable, but the major problems stemmed from the execution and breadth of the changes. Crisis such as hyperinflation and devaluation of the currency had major socioeconomic consequences. Mansourov sees a macroeconomic problem in the DPRK, but he is confident that the DPRK has the right tools to make economic reform successful. Now is the time for Kim Jung-un to continue some of his father's initiatives and learn from past economic reform mistakes.¹⁶

4. The ROK's Economic Model

Mansourov mentions that Kim Jong-il was fascinated by the success President Park Chung-hee had in turning the ROK's economy into a so-called "East Asian miracle."¹⁷ Stephen Haggard describes the success of the policies in ROK during its meteoric economic rise.¹⁸ The ROK created an economic committee called the Economic Planning Board (EPB) composed of technocrats, bureaucrats, and capitalists who were able to plan a way ahead for the fledgling economy. Haggard pinpoints several areas of the ROKs success:

- Creation of institutions that support the planned economic policies is critical to the smooth implementation of the objectives and for interaction among all the key players;
- Reliance on comparative advantage to expand export-oriented industrialization (EOI);
- Creation of an environment in which enterprises are driven by incentives to increase productivity and efficiency;
- Taking advantage of backwardness through technology transfers and exchange of data;
- Emphasis on education to promote innovation;

¹⁶ Ibid.

¹⁷ Ibid., 42–44.

¹⁸ Stephan Haggard, *Pathways from the Periphery: The Politics of Growth in the Newly Industrializing Countries* (Ithaca: Cornell University Press, 1990), 18–21.

- Earning the exchange rate to control inflation and an effort to select, shelter, and guide potential winning enterprises to become competitive in the international market.¹⁹

These are all areas of weakness in DPRK's economic structure. If the technocrats, Korean Worker's Party, bureaucrats, capitalists, and Kim Jung-un all support the economic policies these areas can help rejuvenate the economic strength and lead to economic progress. There are several reasons why the ROK economic model has a better chance at assisting the DPRK. The ROK's economic model fits well because the history and culture are similar to DPRK's. Both countries dealt with authoritarian regimes in the past (DPRK, hard-line; ROK, soft). The ROK's model has proven successful to this day. Finally, the ROK would be one of the biggest donors of the DPRK's attempt at economic reform.²⁰

5. The Taiwan's Economic Model

Another economic model that complements the DPRK's is Taiwan's. Yongping Wu details Taiwan's transformation of its political environment and economy from 1950 to 1985.²¹ I will use this book to compare Taiwan's similarity in political structure to expand upon the potential economic growth that the DPRK might achieve by following parts of Taiwan's economic policies. Chiang Kai-shek was a leader who wanted to take back mainland China after he was forced to take refuge in Taiwan. His stay on the island was to be short-term while coming up with a plan to counter-attack. At that time, aid was pouring in from the U.S., but Chiang primarily used the aid to build his military. The remaining aid was used to restore the economy. As Wu states, the ROC had four economic goals to bring life to Taiwan's economy: restore production, earn foreign exchange, maintain defense expenditures, and fight inflation. Taiwan received economic

¹⁹ Haggard, *Pathways from the Periphery*, 18–21, 23–26.

²⁰ Ibid., 23–26.

²¹ Yongping Wu, *A Political Explanation of Economic Growth: State Survival, Bureaucratic Politics, and Private Enterprises in the Making of Taiwan's Economy* (Cambridge: Harvard University Press, 2005), 1–3.

guidance from the U.S. The policy was to revive the private sector, simultaneously building a relationship with the state and large firms. Taiwan focused on shifting to exports and upgrading their industrial capabilities.

This book's assertions lend credibility to my argument that similar authoritarian regimes can indeed succeed in economic reforms with the right policies in place. There will be bumps along the way, but Taiwan proves that in the long run, the economic reform was a success. Along with the ROK model, Taiwan's model can help the DPRK's economy. Both regimes were hard line authoritarian regimes. Both governments were focused on building their military and reliant on international aid to keep their regimes afloat. Finally, Taiwan was in economic shambles before steering its economy to success by controlling inflation, creating institutions, building heavy industry along with infrastructure, and relying on Taiwan's economic committee to make centralized policy decisions.²²

6. China's Balancing Act

The biggest question is how will the DPRK implement its economic reform and allow some form of openness to the international community after more than six decades of repressive rule. Wang Hui's book, *China's New Order*, is a critical piece in this thesis because it suggests that the DPRK regime can emulate the Chinese success in economic reform and still maintain power.²³ The Chinese model was not part of the East Asian miracle, but it is important to view the Chinese model from the perspective of both export-oriented objectives and the state's ability to maintain control over the population, while still opening to open-market economy. The critical part is how China was able to transition and still maintain its political ideology. The Chinese reform started by identifying the weakness within the society—the gap between the rural and the urban populations. It is important to address how the public will react to economic reform and changes in the DPRK's policies and ideology. The DPRK has used repression as means

²² Wu, *A Political Explanation of Economic Growth*, 1–6.

²³ Ibid., 2–3.

to crack down on dissident behavior and thrown thousands of dissidents into work camps. Without the ability of the DPRK to maintain the same degree of repression while pursuing of economic reform, how will the DPRK maneuver through the uncharted territory? Hui's book will enlighten what restrictions are appropriate within state control and what is not. The book helps to address the optimum state control to maintain economic progress and still be able to have orderly conduct by citizens.²⁴

7. Economic Potentials

The DPRK has the potential to succeed with reform and indirect support from the international community. Most importantly, Kim Jung-un cannot make the same policy mistakes as his father. It is critical for the DPRK to understand its comparative advantages and efficiently utilize its assets. Goohoon Kwon shows the long-term growth potential of the DPRK.²⁵ Kwon outlines the strengths of the DPRK that can be utilized to propel its economy: an abundant and competitive labor force, natural resources, the potential of large gains through productivity growth and currency appreciation that are normal part of developing country. The DPRK has one of the highest literacy rates in the world. If the DPRK takes advantage of its potential human capital and low wages, there is plenty room to grow. According to Kwon's research, the DPRK can use the mineral resources as its comparative advantage in export to other countries. In comparing transition economies of both Asia and Europe, there was on average 7.3 percent growth after economic reforms were in place between 1992-2008. Much of the growth came from more efficient allocation of resources and better use of existing resources. Also, previous transition country data show that the DPRK purchasing power can grow much faster than the real GDP. This article will help to find the comparative advantages of the DPRK and its potential in operating in the world economy.²⁶

²⁴ Wang Hui, *China's New Order* (Cambridge: Harvard University Press, 2003), 20–23, 28–31.

²⁵ Kwon, *A United Korea*, 13.

²⁶ Ibid.

8. The Way Forward

The ROK, Taiwan, and the China models are not perfect, and there is no silver bullet to the DPRK's economic problems. The DPRK's technocrats have to consider its current political and social environment and select the most suitable economic policies that fit their current situation. Suk Hi Kim offers an overview of some of the possible economic reform policies that the DPRK could try.²⁷ Kim puts heavy emphasis on price liberalization based on supply and demand versus manipulation of price control, which can be hazardous in an open-market economy. Price liberalization can lead to improvements in incentives for workers to produce only if it is combined with macroeconomic stabilization. Another key element Kim mentions is privatization of state-owned enterprises. Kim notes that the DPRK's GDP has grown 20 percent over the last 10 years, which might be a sign emphasizing the importance of revamping the existing SEZs. Kim takes a sequential approach over a simultaneous approach in fixing the inefficiencies of the SEZs. Of the four SEZs, Kim states that the two ROK-led SEZs have the most potential. Kim breaks down three stages for enhancing DPRK economic growth. The first stage focuses on labor intensive light industries (comparative advantage with low wages and skilled labor force). The second stage approaches technology intensive industries such as electricity and machinery. The last stage focuses on high tech industries such as IT through technology transfers. Kim emphasizes that the SEZs should be utilized in transitioning one stage after another.²⁸ I definitely agree with Kim that the DPRK's economic reform should proceed in stages. Any simultaneous approach or unproven method can result in major failure. The ROK SEZs should be focused on first because they have been proven successful and the two Northern SEZs supported by both Russia and China have been abandoned. The DPRK met failure with price control back in 2002. Price liberalization with natural supply and demand is the best course of action.²⁹

²⁷ Suk Hi Kim, Terence Roehrig, and Bernhard Seliger, *The Survival of North Korea* (London: McFarland 2011), 166–171.

²⁸ Ibid.

²⁹ Ibid.

Young Whan Kihl provides an in-depth look into the DPRK's economic status and perspective. Kihl applauds the regime for taking up economic reform initiatives by making adjustments in wages, increase autonomy of enterprises, authorization to establish markets, and limited opening to foreign investments, but he also criticizes the overall effort in implementing the policies.³⁰ The limited efforts in executing the policies have hampered the economic developments of the DPRK. Kihl regards the success of the Kaesong Industrial Complex, which was closed down for the first time in its history, though recently reopened, as a small milestone in spreading success throughout the country. The DPRK has steadily made development in increasing its exports such as mineral products to generate foreign exchange to fund other imports. The DPRK has even imported aquaculture technology to increase production of cultivated fish. Although these developments are minor, they still show that the DPRK is making efforts towards its economic policy objectives. The book also highlights the DPRK's major sources of income coming from mostly China and the ROK. The DPRK has to slowly phase out of the illicit activities in order to receive aid from the international community. Surprisingly, the U.S. has given the DPRK favorable trade nation status under the pseudo "Made in South Korea," name. This allows the DPRK to produce products that are exported to the U.S. under the ROKs name. Most importantly, Kihl underscores that all of the countries in the Six-Party Talks do not welcome the collapse of the DPRK's economy and the chaos that might follow the disaster. All the participants have some sort of economic ties to the DPRK and would rather see the DPRK succeed than falter for their own self-interests.³¹

Patrick McEachern's book, *Inside the Red Box*,³² is interesting because it addresses almost all aspects of the thesis. McEachern states that the DPRK had no choice but to reform economically in the 1990s due to economic conditions resulting from the

³⁰ Young Whan Kihl and Hong Nack Kim, *North Korea: The Politics of Regime Survival* (New York: M.E. Sharpe, 2006), 12–126.

³¹ Kihl, *North Korea: The Politics of Regime Survival*, 131–134.

³² Patrick McEachern, *Inside the Red Box: North Korea's Post Totalitarian Politics* (New York: Columbia University Press, 2010), 143–144, 211–212.

drastic decrease in Soviet aid and natural disasters that destroyed food production. The DPRK also stopped the production distribution system (PDS) when the economy faltered and there was not enough food for distribution. On top of that, the DPRK was open to market activities to substitute for the stoppage of the PDS. This suggests an indirect correlation between economic downturn and the need for economic reform.

This thesis argues that Chinese can make or break the DPRK based on trade. It can be safe to assume that most authoritarian leaders would be open to brokering a deal if the regime can continue to exist in exchange for few cards on the deck. Andrei Lankov suggests that China does not hold the political leverage to make the DPRK's decision, but it does hold the stick when it comes to the economy.³³ My suggestion is for a simultaneous approach for the DPRK to pursue economic reform along with a U.S. and Chinese with Pyongyang that would legitimize its leadership with international aid to propel the DPRK's economy. A major deal would be dictated by both the U.S. and China using their financial leverage to convince Kim Jung-un that his regime would be able to stay in power and they would receive economic guidance and aid from the international community in turn restricts some nuclear advancement. This deal would be a win-win situation for all those that are involved with the Six-Party Talks. Kim would be able to maintain his regime with the international support. China would still maintain the DPRK as a buffer zone. The U.S. can continue its concentration on China instead of worrying about nuclear instability in the Northeast Asia region. China would support since they can maintain the DPRK as a buffer state along with keeping the status quo. Japan would no longer have to worry about nuclear threats. At last, the ROK does not have to worry about absorbing the North if there would ever be a collapse to the regime. History has shown that most of the Asian countries that pursued open-market economy eventually transitioned into a democratic state. The international community should not force the DPRK into a democratic state, but just let time work its magic.³⁴

Finally, I agree with many of the arguments that Lankov makes of the current and past events in the DPRK, but I will argue against Lankov's dismal view in his book, *The*

³³ Lankov, *The Real North Korea*, 109.

³⁴ McEachern, *Inside the Red Box*, 143–144, 211–212.

Real North Korea: Life and Politics in the Failed Stalinist Utopia, of the DPRK's economic reform. Lankov takes a middle ground approach in analyzing the DPRK.³⁵ He highlights the diplomatic tactics that the DPRK has used to sustain the Kim regime. Lankov explains that opening up to the international community would mean demise of the regime or political suicide based on its ideology. Lankov alludes that there are some benefits to engagement with the DPRK by the international community. He provides a short- and long-term perspective of what would happen to the regime. He states that DPRK is likely to continue for some time, but there is an end in sight. I argue against Lankov's premise that openness will lead to the demise of the regime. Yes, the immediate and sudden openness without a transition plan would be a shock to the citizens of DPRK, but there are gradual approaches to transition to make the landing less painful. The Chinese approach is an option for the DPRK to gradually open up its economy to the international community. I will also argue that the DPRK's regime has every bit of seriousness to press for reform with the new leader.³⁶

D. METHODOLOGY

This thesis's main methodology is comparative case studies. It compares similar authoritarian regimes, and past economic reforms, and analyzes the end results. The case studies focus primarily on East Asian countries such as the ROK, Taiwan, and China. It does not assume that all the policies that worked to successfully transform the economies of the ROK, Taiwan, and China would be useful for the DPRK. It argues that case-by-case scenarios offer the possibility of creating a hybrid model that be specifically tailored toward the DPRK and its current political, social, and economic environment. Comparing the DPRK to the three other countries assessed here provides enough data points to establish the likely effects of economic reform and the results.

³⁵ Lankov, *The Real North Korea*, 109–111.h

³⁶ Ibid.

II. THE ROOTS OF PAST ECONOMIC FAILURES

A. LEARN FROM THE PAST

Henry Ford was a pioneer who developed and manufactured the Model T automobile and founded the Ford Motor Company. Ford was quoted as saying, “failure is simply the opportunity to begin again ... this time more intelligently.”³⁷ Kim Jong-un’s transition to power may be considered a golden opportunity to massage some of the economic policies his father envisioned and to not repeat the same mistakes from the past. In order to implement economic reforms that are realistic and achievable, past attempts—successes and failures—have to be deeply scrutinized. Unfortunately, the Democratic People’s Republic of Korea (DPRK) has experienced more of the latter. After a successful economic ascent starting after the Korean War, the DPRK began to struggle in the late 1970s and notably throughout the 1980s–1990s.³⁸ When the powerful Soviet Union fell, it was a crushing financial blow to the DPRK. The DPRK’s attempts at economic reforms had resulted in devastating social consequences. The reforms were half-hearted and loosely implemented. Some analysts feel that major economic reforms would go against the regime’s philosophy because such reforms would require the pariah DPRK state to open its arms to the international community.³⁹ Opening up to the outside world could have critical consequences. Why did the DPRK fail miserably to transform its once-viable economy? There are five reasons, according to author Victor Cha:

1. Imbalance in concentration of industries,
2. Conflicting ideology,
3. Heavy debt,
4. Inclination to mirror the Republic of Korea’s (ROK’s) success, and
5. Resource curse.⁴⁰

³⁷ “Failure Quotes,” Quote World, www.quoteworld.org/categories/failure.

³⁸ Cha, *The Impossible State*, 110.

³⁹ Lankov, *The Real North Korea*, 114.

⁴⁰ Cha, *The Impossible State*, 110–112.

B. IMBALANCE IN THE PORTFOLIO

The DPRK tried to rebuild its state with assistance from the Soviet Union and China after the Korean War. It reaped the benefits of the Japanese Colonialism period with the positioning of heavy industries, physical capital, and human capital before the war, but U.S. forces destroyed the majority of the DPRK's heavy industrial complexes through aerial assaults. The Soviets granted the DPRK \$250 million in aid to help recuperate the state after the war.⁴¹ The DPRK also received about \$500 million in aid packages from the Chinese, along with trade agreements with China, which accounted for 45 percent of the DPRK's total trade.⁴² The Soviets advised dividing the \$250 million by allocating half to establishing a military and the remaining in equal amounts to rebuilding the light and heavy industries.⁴³ There was some logic behind the Soviet Union's recommendation regarding the percentage breakdown of the aid allocation, but, Kim Il-sung did not adhere to the advice, deciding to primarily emphasize the heavy industry with the intention of rebuilding the fragile economy. Kim failed to consider the importance of light industry and the agrarian sector. Unless Kim was able to import food from other countries, he risked starving his people by concentrating the DPRK's physical and human capital on the heavy industry only. He put the interest of his regime and the crony elites before the DPRK citizens. This obvious imbalance in economic focus led to a reliance on more food aid from the Soviet Union and China.⁴⁴

⁴¹ Cha, *The Impossible State*, 112.

⁴² Ibid., 113.

⁴³ Ibid.

⁴⁴ Ibid.

**Figure 1 Sectoral Distribution of Concessional Loans from China
(by the end of 2009)**

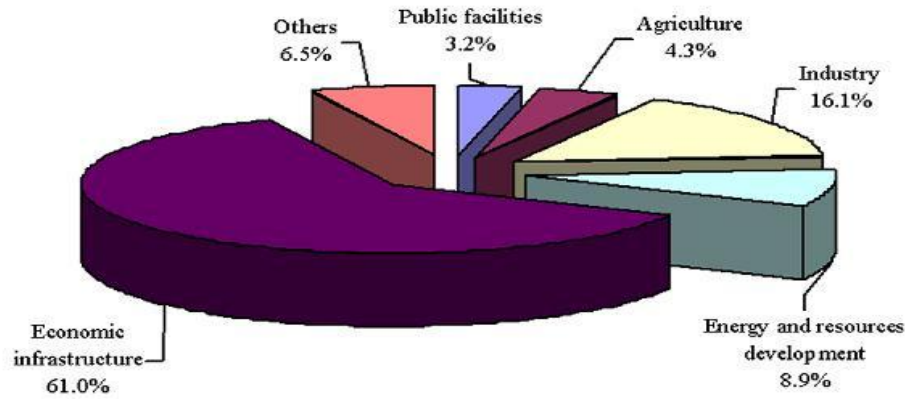


Figure 1. Loan Distribution from China ⁴⁵

C. CONFLICTING IDEOLOGY

The DPRK is run with conflicting ideologies. It claims Juche as its main ideology by focusing on self-reliance in managing the state, but there are some inconsistencies depending on the situation.⁴⁶ The DPRK leadership chooses an ideology which suits the best purpose for its well-being. Kim Il-sung was the originator of the Juche ideology and believed that any shortfall in production could be overcome with motivation and mass human capital, taking a page out of Mao Zedong's Great Leap Forward experiment. Kim also set quotas that were impossible to achieve by human capital alone.⁴⁷ Without the right tools and physical capital, it meant long and painful work hours for laborers. The DPRK used dilapidated and outdated machines to excavate coal (the West used more efficient technology and fewer people to mine an exponentially higher amount of coal than the DPRK). Kim's first Three-Year Plan to rebuild the economy resulted in failure

⁴⁵ "China's Foreign Aid: Sectoral Distribution of Concessional Loans from China," Gov.cn, accessed March 12, 2014, http://english.gov.cn/official/2011-04/21/content_1849913_4.html.

⁴⁶ Cha, *The Impossible State*, 113–115.

⁴⁷ Ibid.

due to inefficiencies and mismanagement. He had to extend the Three-Year plan to additional years to meet the objectives set forth at the beginning of the program.⁴⁸

The transition to Kim Jong-il was the beginning of inconsistencies in the DPRK's ideology framework. With the economic downturn and natural disasters that continued after the leadership transition, Kim Jong-il was forced to deliver economic performance instead of relying on the Juche ideology. Unfortunately, economic performance and Juche did not go hand in hand. The regime faced the dilemma of how to manipulate its founding ideology and at the same time improve the economy. For example, the DPRK stopped its production distribution system (PDS) in the face of famine and allowed open market activities. Eventually, when the DPRK was able to reopen the PDS, the government allowed open market activities, but also decided to bring the market economy to a halt and resume the PDS whenever it pleased. Sadly, the inconsistencies only made the public suffer.⁴⁹

In 2009, Kim Jong-il ordered a reform of the DPRK currency to curb hyperinflation. The goal of the regime was to curb the money supply to bring stabilization to purchasing power. The government suddenly announced an exchange of banknotes with restrictions on the amounts. This was unfavorable to black market entrepreneurs, who found themselves less wealthy overnight. Many foreign analysts questioned the currency reform because there was a flaw in its mechanism. The DPRK currency reform allowed a 10,000percent increase in wages, but kept the prices of goods at the same price level. When the regime approved the plan, it failed to comprehend that increasing the wages by 10,000 percent and keeping goods stagnant would create more hyperinflation than would an increase in the standard of living.⁵⁰ The reform was disastrous from the start. The market did not want to sell goods at well below its prices, so merchants stopped selling goods; this even affected the elites, who had difficulty finding food for their families. A Korean Worker's Party official, Pak Nam-gi, became

⁴⁸ Cha, *The Impossible State*, 113–115.

⁴⁹ Ibid.

⁵⁰ Ibid., 156–157.

the scapegoat for the failed currency reform and it marked his death. Kim Jong-il tried to cover up the fiasco by going back to the Juche ideology.⁵¹

D. DEBT-RIDDEN

The DPRK was riddled with debt, which resulted from increased, unnecessary military spending. From 1968 to 1979, the DPRK outspent its South Korean counterpart on defense.⁵² The DPRK military grew late in the 1960s from 485,000 troops to 720,000 by the 1980s.⁵³ The DPRK had plenty of natural resources that it could have taken advantage of by trading with the international community, but it decided to focus primarily on its military and fulfill its budget shortfalls by borrowing from countries like France (\$80 million), the United Kingdom (\$160 million), and Japan (\$400 million); these amounts are in addition to the aid the DPRK received from both the Soviet Union and China.⁵⁴ Soon, foreign governments came to the conclusion that the DPRK would default on its loans. The DPRK owed a total of \$12.5 billion at its peak.⁵⁵ At one point, the DPRK asked Moscow to graciously forgive its \$8.8 billion debt, but the Soviet Union refused the request.⁵⁶ The DPRK was successful in bartering ginseng for some of the defaulted loans to a few countries, but the remaining balance appeared insurmountable. With its credit rating becoming worthless to the international community, the DPRK had no choice but to engage in illicit activities to survive.⁵⁷

⁵¹ Lankov, *The Real North Korea*, 126–131.

⁵² Ibid., 116–117.

⁵³ Ibid. 116.

⁵⁴ Ibid.

⁵⁵ Ibid., 117.

⁵⁶ Ibid.

⁵⁷ Ibid.

World Rank	Country	GDP (%)	Date of Information
25	 China	4.30	2006
28	 United States	4.06	2005
31	 Russia	3.90	2005
58	 South Korea	2.70	2006
149	 Japan	0.80	2006
(1)	 North Korea	22.90	2003

Table 1. Military Expenditures (Percent of Gross Domestic Product)⁵⁸

E. KEEPING UP WITH THE JONESES

The DPRK made illogical decisions on multibillion-dollar construction projects to keep up with the ROK's economic rise. The ROK had, in the early 1980s, won the bid to host the 1988 Summer Olympics in Seoul.⁵⁹ At this point, the DPRK's economy was faltering and it could not fathom the ROK was becoming more successful than the DPRK, especially hosting the caliber of an international event like the Olympics. The DPRK had to come up with a plan to show the public that it was still at the forefront of the race with the ROK. The DPRK leadership decided to pour what remained in its coffers into construction projects to host the equivalent of an Olympic-size event for its people. One mega project tried to defy the forces of the Earth: the DPRK planned to build a tunnel that was about 130 feet deep underneath a mountain to divert water to a natural river.⁶⁰ This project eventually resulted in failure, which was followed by another \$1.77 billion project to build the longest dam in the world.⁶¹ The DPRK just did not have the technological capacity to complete these projects. Many of the projects were stopped in the middle of construction because it was realized that either the project was not feasible or ran out of funding. The leadership rushed into projects too large for what it was actually capable of completing. The DPRK leadership also resorted to terrorist acts

⁵⁸ John Feffer, "Military Spending in the Asia-Pacific Region," *Pacific Freeze*, October 28, 2008, <http://pacificfreeze.ips-dc.org/2008/10/military-spending-in-the-asia-pacific-region/>.

⁵⁹ Cha, *The Impossible State*, 118.

⁶⁰ Ibid., 118–119.

⁶¹ Ibid.

against the ROK by hijacking and blowing up a Korean airliner in 1987 in an attempt to put fear into the Olympic committee and the cause cancellation of the 1988 Olympics.⁶² The DPRK also got blindsided when its two allies (the Soviet Union and China) decided to participate in the 1988 Summer Olympics.⁶³

F. HEAVY RELIANCE ON DONORS

Finally, with a string of failures in multibillion dollar-projects in the 1980s, the DPRK was struck by a perfect storm when Soviet aid ended. The Soviet Union had been the lifeline of the DPRK. The Soviets played a crucial role in lifting the DPRK from the devastation of the Korean War and bringing it back to life with a combination of aid packages and trade agreements. The two countries signed the Treaty Concerning Economic and Cultural Cooperation agreement in 1949 binding them in a first-ever economic treaty.⁶⁴ The treaty gave a mutual most-favored-nation status.⁶⁵ The treaty also outlined specifically which commodities would be traded between the two nations.⁶⁶ As part of the treaty, the Soviets also extended a credit of 212 million rubles for up to three years beyond 1949.⁶⁷ There was also academic and technical assistance offered to the DPRK—the treaty outlined technical assistance be provided in areas such as iron works, zinc works, automobile assembly plants, steep pipe plants, blueprint designing, and geological surveys.⁶⁸ Soviet scientists and academics were also invited to visit DPRK schools for lectures; student exchange programs were also created to provide the DPRK with the wealth of Soviet knowledge.⁶⁹ At that time, trade with the Soviets reached its peak at 80 percent, but started to decrease to an average of 40 percent starting in the

⁶² Cha, *The Impossible State*, 121.

⁶³ Ibid.

⁶⁴ Joseph Chung, *The North Korean Economy* (Stanford: Hoover Institution Press, 1974), 109–120.

⁶⁵ Ibid., 110.

⁶⁶ Ibid.

⁶⁷ Ibid., 112.

⁶⁸ Ibid., 114.

⁶⁹ Ibid., 115.

1960s.⁷⁰ As a result of the DPRK finding other sources of trade, the Soviet Union stepped aside as the DPRK's main donor. The majority of products exported to the Soviet Union were deemed substandard. In 1964, a report in the Russian newspaper *Pravda* marked the 15th anniversary of trade agreements with the DPRK.⁷¹ The article reported that more than 40 industrial plants were built with the assistance of Soviet Union aid and specified that combined electric power and heat-generating plants were also built with the help of the Soviet technicians in Pyongyang.⁷² In addition, the Soviets reconstituted more than 50 industrial complexes after the damage from the Korean War. Finally, the Soviets provided more than 2,000 sets of technical data specifications to the DPRK to improve its industrial base.⁷³

With the end of the Cold War, Moscow decided that it was no longer in its best interest to support the DPRK. Before the aid stopped, DPRK's trade with the Soviets accounted for almost 50 percent of the aggregate, but that dwindled down six fold by the early 1990s.⁷⁴ The sudden removal of aid packages crippled the DPRK economy. Without adequate aid and support, the DPRK could not meet its energy quota. Without adequate crude oil and petroleum imports, DPRK machinery came to a halt.⁷⁵ The DPRK could not run its steel factories or produce chemical fertilizers and cement. Most of the factories were running at 20 percent of full capacity.⁷⁶ The shortfall in food production partly led to the famines in the mid-1990s that killed an estimated 400,000 to 4 million people.⁷⁷

⁷⁰ Ibid.

⁷¹ Chung, *The North Korean Economy*, 118–120

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Cha, *The Impossible State*, 123.

⁷⁵ Ibid

⁷⁶ Ibid., 124.

⁷⁷ Ibid., 125.

The Chinese provided the second-most incentives to the DPRK after the Korean War.⁷⁸ The Chinese also had a great impact on the DPRK during the Korean War by providing commodities such as grains, meat, blankets, clothing, cotton, and cigarettes—in addition to military assistance to defend against United Nations’ (UN) forces.⁷⁹ In 1953, the two countries signed an economic pact in Peking. The DPRK mainly exported machine tools, pig iron, metal, and alloy steel to China, whereas China sent coal, oil, cotton, raw rubber, sugar, and structural steel to the DPRK.⁸⁰ China’s economic aid to the DPRK came in two forms: credit and aid. The Chinese gave \$325 million to the DPRK in four installments from 1954 to 1957 as part of the DPRK’s reconstruction.⁸¹ Most of the Chinese technical assistance was concentrated around light industry (textile, leather processing, rubber processing, paper manufacturing, and construction) as opposed to the Soviets who provided great in-depth knowledge in the heavy industry area. Most of the Chinese military was still stationed in the DPRK after the Korean War. They were utilized mostly to assist in rebuilding bridges and to provide other forms of hard labor.⁸² The Chinese provided three sets of interest-free loans to the DPRK after 1958, with the loan amounts ranging from \$10 million to \$105 million.⁸³ The loans were used to build structures such as electric plants, tire factories, and radio equipment factories. All of the loans were to be paid off in the form of commodities during a 10-year period.⁸⁴

Although the DPRK had the possibility of independently rising from poverty after receiving assistance from outside sources, it never broke the cycle of aid to fully develop its potential. With the continuation of reliance on aid, the DPRK was set up for vulnerabilities and living perpetually as a welfare state. International sanctions resulting from the DPRK’s nuclear aspirations, and terrorist acts did not help because restrictions

⁷⁸ Chung, *The North Korean Economy*, 120.

⁷⁹ Ibid.

⁸⁰ Ibid., 121.

⁸¹ Ibid.

⁸² Ibid., 122–124.

⁸³ Ibid.

⁸⁴ Ibid.

limited its trading partners; the DPRK had no choice but to rely heavily on China.⁸⁵ The DPRK desperately asked for assistance from the World Food Program and non-governmental organizations to fulfill its shortfall in food production. The 1980s and 1990s were total disasters, in part to Kim Jong-il's economic policies. The DPRK could not recover from the mismanagement and decisions, many of which defied logic.⁸⁶

Aid Contributions from Fraternal Nations (millions of rubles)

USSR	292.5
China	258.4
GDR	122.7
Poland	81.9
Czech	61.0
Romania	22.0
Hungary	21.0
Bulgaria	18.7
Albania	0.6
Mongolia	0.4
North Vietnam	0.1
TOTAL	879.3 million rubles

Table 2. Aid Contributions from Communist Blocs⁸⁷

G. GLIMPSE OF CHANGE

Kim Jong-un's transition to leadership marked unprecedented events and speeches that went against his predecessor's vision. Kim discussed the idea of bringing foreign investments into the DPRK, as evidenced in his 2013 New Year's address to the public. He mentioned his intention to hire German lawyers and economists to look into the possibility of opening the DPRK's economy to foreign investments.⁸⁸ Also, the privileged class of about 900,000 DPRK citizens was granted usage of cell phones, but was limited to access only within the DPRK.⁸⁹ According to the Associated Press's

⁸⁵ Cha, *The Impossible State*, 121–124.

⁸⁶ Cha, *The Impossible State*, 125–128.

⁸⁷ Charles K. Armstrong, "Aid Contributions from Communist Blocs," *The Asia Pacific Journal: Japan Focus*, last modified December 10, 2013. www.japanfocus.org/-charles_k_-armstrong/3460.

⁸⁸ "North Korea Will Allow Mobile Internet Access from March 1," *NK News*, February 22, 2013, www.nknews.org/2013/02/north-korea-will-allow-mobile-internet-from-march-1/.

⁸⁹ Ibid.

Pyongyang Bureau, the DPRK approved Internet access to foreign visitors starting in March 2013. KoryoLink has worked in Korea since 2009 to develop 3G Internet capability. Although this is great news for foreigners, DPRK citizens will still not be able to access the Internet or make phone calls outside the country. The 3G network capability is reported to cover 13.8 percent of the DPRK and 92.9 percent of the population area.⁹⁰ Eric Schmidt, the chairman of Google, visited the DPRK and emphasized the importance of increasing Internet access to the public because it would be vital to DPRK's economic development.⁹¹

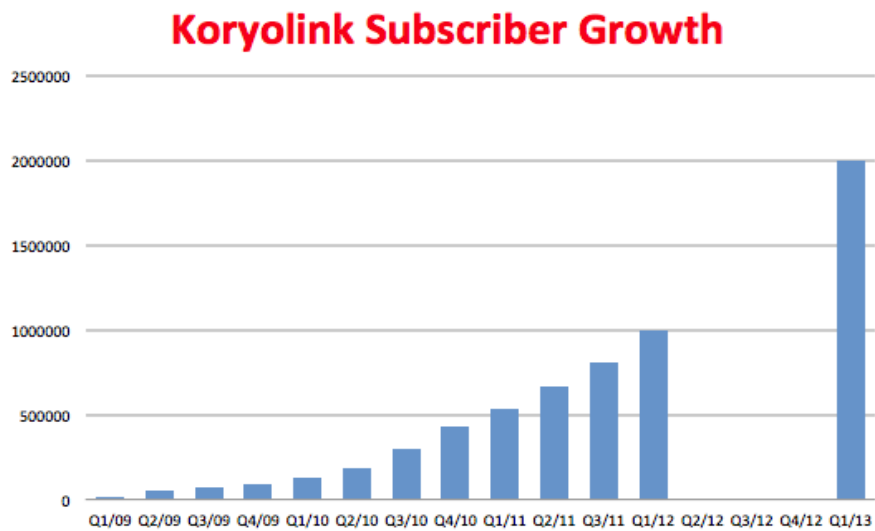


Figure 2. Cell Phone Subscribers to KoryoLink 2009–2013 4Q⁹²

Although the DPRK has built economic zones with the help of China and the ROK in the past, it also has to concurrently build upon the infrastructure with major economic policy reforms to further develop the country. Economic zones such as Kaesong Industrial Park, Sinuju Special Administrative Region, and The Mount

⁹⁰ “North Korea Will Allow.,” *NK News*, 1.

⁹¹ Ibid.

⁹² “Koryolink nears 2 million subscribers,” North Korea Tech, <http://www.northkoreatech.org/2013/04/26/koryolink-nears-2-million-subscribers/>.

Kumgang Tourism Zone are not enough to revive the economy, but are good initiatives.⁹³ Time will eventually shed some light on whether or not Kim Jong-un is a reformer. There is much work to be done to change the mindset of the DPRK's leadership, and it all has to start from instilling accountability within its governance. Economic changes will not live up to their potential unless the DPRK advocates for political stability that will ensure that outside investors are confident about investing their funds into the reclusive state. If the regime is dedicated and truly believes in its economic reforms, Kim will have to implement regulations in industries to monitor private companies, fight corruption, and uphold accountability. With proper political and economic stability, it is highly likely that foreign investments will flow into the DPRK.

93 Andrei Lankov, "North Korea-China Special Economic Zone," *East Asia Forum*, www.eastasiaforum.org/2011/07/14/north-korea-china-special-economic-zones/.

III. THE ROK AND TAIWAN'S ECONOMIC MODEL

A. THE ROK'S ECONOMIC MODEL

The ROK and Taiwan in their early stages, before their economic success, mirror the DPRK's current economic conditions. Both the ROK and Taiwan share many similarities in their journey in becoming a model nation-state. Both countries have become economically successful after instituting major changes to their economic policies. It is difficult to believe that these two countries once lived in poverty and were forced to live under Japanese colonialism. Despite being governed under varying degrees of an authoritarian system, the leadership of both the ROK and Taiwan rendered sound economic decisions resulting in lasting prosperity. Surprisingly, on their road to economic haven, both countries transitioned from hard authoritarian regimes to democratic states.

The ROK has always been a target of takeover because of its weak government and thirst for imperialism by neighboring states. Japan colonized the ROK from 1910 until the end of World War II.⁹⁴ The DPRK was better positioned to succeed economically than the ROK because both the Soviet Union and China fully supported the DPRK's efforts to rebuild, whereas while the United States did not fully embrace the interim ROK president, Rhee Syng-man. The United States was very suspicious of the ROK government's true allegiance and the rampant corruption within its bureaucracy. It was not until General Park Chung-hee's successful military coup d'état over President Rhee's government that the United States was swayed to provide major aid to the ROK.⁹⁵

The two decades from 1960s to 1970s saw rapid growth and expansion in the ROK's economy.⁹⁶ Former President Park's long-term goal was to reduce the reliance on the U.S. aid and eventually to become self-sustaining. After the initial round of aid from the United States, the ROK quickly planned actions toward economic reform. The ROK

⁹⁴ *South and North Korean Economies*, 9.

⁹⁵ *Ibid.*, 9–10.

⁹⁶ *Ibid.*

established an EPB and promoted a planned market economy broken into four phases.⁹⁷ The EPB tried to find areas within the economy where they possessed comparative advantage over the international market. The ROK's main comparative advantage was within its human capital. The authoritarian system allowed more flexibility in using this human capital without the legitimacy of labor rights and unions. It drew on its labor force to work as one team and encouraged the workforce to pour their hearts out for the sake of their country's development and future.⁹⁸

Next, the board implemented policies to devalue the currency to make its exports more competitive. The board selectively chose companies that it felt would succeed. The EPB instituted incentive programs for the private sector to perform to its highest level by providing tax rebates and low-interest loans and grants. The board implemented protectionist strategies by insulating infant industries with subsidies until the companies proved they were ready to compete in the international market.⁹⁹

The government nationalized commercial banks to make capital easily available for the private enterprises to invest into research/development and production. The relationship among the government, financial institutions, and private enterprises allowed decisions and information to be made efficiently and effectively. The executives of the private enterprises and the government met frequently to strategize and to discuss strengths and shortfalls. This collusion resulted in bringing transparency to the economic framework, but at the same time indirectly promoted corruption. Overall, the government's planned economy strategy worked well in fostering the companies and avoiding pitfalls.¹⁰⁰

The ROK was fortunate enough to receive technology transfers and administrative knowledge from other countries that were ahead of the power curve. Although, the ROK was behind in innovation compared with others, it had the privilege of skipping the

⁹⁷ *South and North Korean Economies*, 8–12.

⁹⁸ *Ibid.*

⁹⁹ Jene L. Kwon, *Korean Economic Development* (New York: Greenwood Press, 1990), 34–35.

¹⁰⁰ *Ibid.*, 36–37.

research and testing phase that saved immense resource and time.¹⁰¹ The luxury of backwardness did not hold back the ROK from spending considerable amount of investment toward education. Statistics showed that in 1944, 90 percent of the ROK population did not have any formal education.¹⁰² By 1984, the statistics improved to where 51 percent of the relevant population was enrolled in secondary schools.¹⁰³ Finally, the ROK in 1990 was able to match on average most of the Organization for Economic Cooperation and Development (OECD) countries in the amount of spending on research and development (R&D) as a proportion of their GDP.¹⁰⁴

The results were astounding, with the ROK averaging an annual 9.2 percent growth in its GDP from 1962 to 1979.¹⁰⁵ There were four stages to the ROK's planned development model.¹⁰⁶ The first covered from 1962 to 1966 soon as Park Chung-hee took over as the second president of the ROK. At the beginning, it was a government led effort in developing areas of "electricity, railroads, ports, and communications."¹⁰⁷ The EPB created metrics to gage the trend. The board promoted a shift from import substitution strategy to export oriented industrialization strategy. The second development plan covered from 1967 to 1971.¹⁰⁸ During this period, the government emphasized its focus on the electronics and petrochemical industries.¹⁰⁹ It maintained its export driven focus and also supported the agricultural sector by controlling the price of rice in assisting the farmers.¹¹⁰ The third economic development plan covered 1972–1976.¹¹¹ During this period, it marked a milestone in which the government produced

¹⁰¹ Kwon, *Korean Economic Development*, 10.

¹⁰² Ibid., 44–45.

¹⁰³ Ibid.

¹⁰⁴ Kwon, *Korean Economic Development*, 10, 44–45.

¹⁰⁵ *South and North Korean Economies*, 19.

¹⁰⁶ Ibid.

¹⁰⁷ Ibid., 20.

¹⁰⁸ Ibid., 21.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

¹¹¹ Ibid., 22.

major developments in all the areas they selectively focused from the beginning. The industry sectors in steel plants, construction, petrochemical plants, and shipyards all saw expansions.¹¹² The government also introduced new initiatives to improve and modernize rural areas to assist the farmers and the fishermen. The government set priorities on specific industries covering heavy and light and later came to develop the agrarian sector. The important factor is that the government tried to balance its portfolio instead of putting all the eggs in one basket like the DPRK had. The fourth development plan covered 1977–1981.¹¹³ At this point, the sheltered industries such as machinery, electronics, and shipbuilding were all unleashed to compete with the overseas companies. With concrete and significant signs of economic growth, the government transitioned to a focus on social development.¹¹⁴

The results were monumental and unprecedented. In a matter of two decades, the ROK transitioned from an agrarian state to an industrialized driven state through the planned economy approach. The economic success partly brought new social movements and armed opposition political parties in supporting a transition from the hardline authoritarian system to a democratic-led state.¹¹⁵

¹¹² *South and North Korean Economies*, 23.

¹¹³ *Ibid.*, 24.

¹¹⁴ *Ibid.*

¹¹⁵ *Ibid.*, 25.

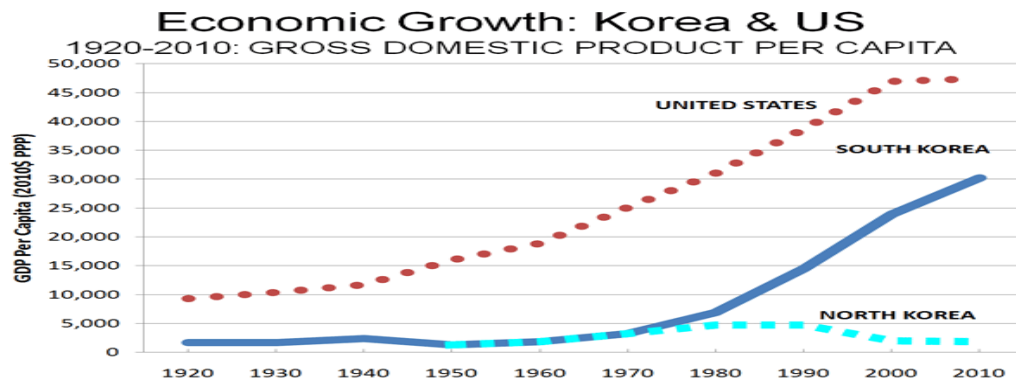


Figure 3. Economic Growth of the ROK¹¹⁶

B. TAIWAN'S ECONOMIC MODEL

Taiwan's economic model is another process that the DPRK can use as a model. There are several areas where Taiwan has similarities with the DPRK. Taiwan was occupied by the Japanese in 1895 because of the defeat of China by the Japanese military.¹¹⁷ Taiwan was an authoritarian government led by Chiang Kai-shek. The Kuomintang was defeated in mainland China and fled to the island of Taiwan in 1949.¹¹⁸ Before 1949, Taiwan relied on China for majority of its trade and resources, but when the country severed its ties with China, it brought hardship.¹¹⁹ Because of the devastations after World War II, the regime had to provide the populace with its basic needs to sustain power. At first, Taiwan's focus was on survival, self-sustainability, and stability instead of pure economic development. Taiwan had to use its scarce resources to produce a quick turnaround to maintain its legitimacy.¹²⁰

Although Taiwan was under U.S. support after World War II, it was walking a thin line due to President Harry Truman's hands-off policy on Taiwan in an attempt to prevent further escalation with the contentious Soviet Union and China. U.S. support

¹¹⁶ Wendell Cox, "Economic Growth: Korea & US," <http://www.newgeography.com/content/002060-the-evolving-urban-form-seoul>.

¹¹⁷ Wu, *A Political Explanation of Economic Growth*, 35.

¹¹⁸ Ibid.

¹¹⁹ Ibid.

¹²⁰ Ibid.

brought protection, legitimacy, and much-needed economic aid. The United States required Taiwan reform its political, economic, and social policies in exchange for aid. The United States granted \$100M in aid packages from 1951 to 1965 to rebuild the country.¹²¹ The aid was helpful because there were no local infrastructures set up on the island. Also, the aid was welcoming news that brought unexpected power for Chiang's interim government and hope for the future of Taiwan. Taiwan's underlying goal was to build its military to overtake mainland China mainly because of Truman's policy. Taiwan spent 80 percent of its foreign aid in strengthening their military and ran its propaganda on the military first objective similar to that of the DPRK.¹²²

Taiwan's leadership had to tighten controls to make sure the country did not falter. This meant that the state had to implement strict controls over its populace and the economy to execute policies. An important note to mention is that Chiang Kai-shek did not interfere with the economic reforms and took a detached approach.¹²³ The Kuomintang was the sole political party of Taiwan, which easily allowed President Chiang to manipulate the system by gradually building a support network around his inner circle. He created an intelligence agency to fend off any detractors to protect the regime from coups. After the defeat of Japanese colonialism, Taiwan was able to confiscate majority of the Japanese properties, which included firms and equipment. The Japanese property helped the Kuomintang get a leg up in starting its economic reform.¹²⁴

Taiwan had four major economic goals: restore production, earn foreign exchange, maintain defense expenditures, and fight inflation.¹²⁵ Inflation was one of the most difficult challenges for Taiwan to counter because of decreases in production, increases in supply of money, sharp increases in population that had shifted from the mainland, and prices exponentially increasing ten-fold from 1946 to 1949.¹²⁶ To add to

¹²¹ Wu, *A Political Explanation of Economic Growth*, 36.

¹²² Ibid.

¹²³ Ibid., 39-40.

¹²⁴ Ibid., 41-44.

¹²⁵ Ibid., 47.

¹²⁶ Ibid., 48.

the shortfalls, Taiwan was in great debt to foreign countries and had to earn its foreign exchange as a means to get out of debt. Its foreign reserve had dried up and Taiwan owed \$10M to foreign entities.¹²⁷ Finally, the vulnerability of attacks from mainland China forced Taiwan to balance majority of its budget into the defense expenditures to protect the island. This put enormous burdens on the state to balance the necessities of the public with the majority of the resources tied up in defense. All of these dire problems motivated the regime to transition into a more liberal economy and to put more emphasis on the greater need for production and export of goods.¹²⁸

These immense obstacles meant that Taiwan had to make drastic reforms to the economic policies to bring the country in par with other developing nations. This meant that the combination of the Ministry of Economic Affairs (MOEA), the Ministry of Finance (MOF), and the Bank of Taiwan had to work cohesively to reform the economic policies.¹²⁹ This was a challenging task, but the country had to meet the four economic objectives in order to bring stability to the economy. The economic reform committees comprised technocrats who had autonomy to make important decisions. The supporting U.S. advisors were influential in the decision-making process and had direct access to President Chiang at because of the enormous aid the United States contributed to Taiwan.¹³⁰

Taiwan was a beneficiary of many wealthy and educated native Chinese exiles who had fled to the island well before the Chiang Kei-shek days. Although Taiwan's information technology sector was virtually nonexistent, the government's investment to education and science in combination with the existing exiles helped to bring expertise in growing the importance of R&D.¹³¹

¹²⁷ Wu, *A Political Explanation of Economic Growth*, 48-49.

¹²⁸ Ibid.

¹²⁹ Ibid., 49-52.

¹³⁰ Ibid., 62-66.

¹³¹ Teng-Hui Lee, *Intersectoral Capital Flows in the Economic Development of Taiwan, 1895-1960* (London: Cornell University Press, 1971), 1.

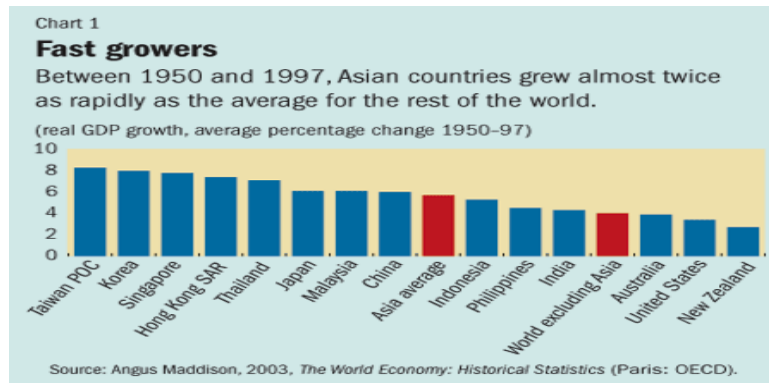


Figure 4. Taiwan's Growth¹³²

Finally, the U.S. support was critical to Taiwan's economic success. Taiwan received more than \$4.2B in aid from the United States between 1949 and 1967.¹³³ During that period, Taiwan had a huge standing army of 600,000 to deter any attacks from China.¹³⁴ The aid packages were crucial in stabilizing the uncontrollable economic downturn of Taiwan caused by huge debt, unstable exchange rate, and inflation. The technocrats' plan was to meet short-term requirements to stabilize the economic distress. During the process, the ideology of Taiwan's economic mindset shifted from the original planned economy to a unique set of open-market economy.¹³⁵

In comparing both the ROK's and Taiwan's economic models, there are many similarities. First, both developing states originally used a planned economy. Second, they both received assistance from the international community especially from the United States. Third, both states needed to earn their exchange rates because of out-of-control inflation. Fourth, each of the states established economic institutions to bring the technocrats together to improve the economy. Fifth, both states insulated private companies until the companies were mature enough to compete in the international

¹³² "Fast growers," <http://www.imf.org/external/pubs/ft/fandd/2006/06/burton.htm>.

¹³³ Lisa Wolfe, "Taiwan: US Economic Assistance in the Early Cold War Years," *Cold War Studies*, last modified April 8, 2011, www.coldwarstudies.com/2011/04/08/taipei-taiwan-us-economic-assistance-in-the-early-war-years/.

¹³⁴ Ibid.

¹³⁵ Ibid.

market. Sixth, each of the states was able to take advantage of backwardness and technology transfers. Seventh, both states shifted from an import substitution strategy to an export-oriented industrialization strategy. Eighth, they both heavily supported the education system. Ninth, both countries had competent human capital that supported the state's efforts toward economic improvement. Finally, both states were once authoritarian governments that transitioned into democratic states with the help of economic advances. There are more similarities, but the top 10 focuses are what the DPRK can experiment with in its attempt at economic reform to bring another unprecedented growth story back to East Asia.

The technocrats and the bureaucrats in both the ROK and Taiwan governments implemented the most logical and efficient policies to drive the economic growth, but there is very little credit to the intangible factor of purely human desire to rid themselves of poverty and infringement on human rights. Both the citizens of the ROK and Taiwan grew up in a generation in which they lacked the basic necessities in comparison to their children, who have reaped the benefits of economic success. On top of living in poverty, they were mandated to give up basic human rights and forced to toil under Japanese rule. Years and years of building the desire and motivation to one day live freely with the basic amenities of life resulted in high growth for both the ROK and Taiwan. Coincidentally, the non-elites of the DPRK desire the same basic necessities of life and human rights, which can be an important factor in the DPRK's economic future if the right set of economic policies is implemented.

Conversely, there were some contrasting ideologies between the ROK and the Taiwan economic models. The ROK government was more involved in the economic daily activities than its counterpart. This was partly because of the inexperience of the Koreans in the commerce sector versus the ethnic Chinese who were a step ahead.¹³⁶ The Taiwan model allowed the market forces to take its course, whereas the ROK model was more plan-driven and later transitioned into an open-market economy. Next, the Taiwan model left its interest rates to the market forces, but the Korean model artificially

¹³⁶ Kwon, *Korean Economic Development*, 42.

suppressed its interest rates to the lowest point possible.¹³⁷ Finally, the manner in which the two governments took actions toward their economic policies was quite different. The ROK tended to be more aggressive and impulsive when it figured out that the economic development was well on its way, whereas Taiwan's approach tended to be more enduring and resilient.¹³⁸ Finally, the ROK placed great emphasis and trust on the conglomerates, also known as Jaebols, in competing with the international market in propelling its economy, but Taiwan's economic focus was on small and medium-sized enterprises (SME) which accounted for 85 percent of its industrial output.¹³⁹

All in all, there is no silver bullet when it comes to restructuring and improving a country's economic condition. With all certainty, the political, economic, and social conditions have to be considered at the time of reform implementation. Although the ROK and the Taiwan economic experiences are tier 1 models to be considered in revamping the DPRK's current economic situation; government leaders, technocrats, and entrepreneurs have to carefully choose specific policies that are in tune with their environment and seriously consider the consequences that come with each decision. Eventually, the mixed basket of the ROK and the Taiwan economic models should steer the DPRK in the right path toward economic stability.

¹³⁷ Kwon, *Korean Economic Development*, 42-43.

¹³⁸ Ibid.

¹³⁹ Ibid.

IV. HOW TO TRANSITION THE DPRK INTO AN OPEN-MARKET ECONOMY?

A. THE CHINESE MODEL

Mao Zedong founded the People's Republic of China (PRC) in 1949 under a communist system after 20 years of a devastating civil war.¹⁴⁰ Mao's focus was to create an egalitarian system and to maintain tight central control by the state. The government implemented radical policy changes to dismantle the drastic gap between the classes and to eliminate corruption. Mao tried to resurrect the economy by implementing the Great Leap Forward, which was an absolute failure. With Mao's death in 1976, the PRC saw a transition away from Mao's ideology and put more focus on economic transformation under the leadership of Deng Xiaoping.¹⁴¹ Deng was the mastermind in bringing economic reforms to the forefront of China's agenda. Deng pursued radical economic policies that were not in line with the PRC's beliefs. After Deng left office in 1987, the Chinese economy continued to flourish under the leadership of Jiang Zemin who continued to support and improve Deng's initiatives.¹⁴² The economic transformation helped bring millions of the lower class out of poverty while increasing the wealth gap between the classes. The irony of the economic success was that capitalist tendencies were a deviation from the PRC's founding ideology. How was China able to transition to the open-market economy and still maintain the political ideology? The answer to this question could help the DPRK immensely to make its transition less of an obstacle.¹⁴³

The success of the economic transformation is dependent upon a two-front approach of systematic reform and development policies.¹⁴⁴ Most successful models

¹⁴⁰ Ronald M. Glassman, *China in Transition: Communism, Capitalism, and Democracy* (Westport: Praeger, 1991), 31.

¹⁴¹ *Ibid.*, 37.

¹⁴² *Ibid.*, 46-49.

¹⁴³ *Ibid.*

¹⁴⁴ Grzegorz W. Kolodko, *From Shock to Therapy: The Political Economic of Postsocialist Transformation* (Oxford University Press, 2000), 69–70.

reflect a strong system and sound developmental policies. One factor cannot live without the other, meaning that a strong system will not last without meaningful development policies to strengthen the overall foundation. China is a perfect example: leadership pursued systematic reforms along with economic developmental policies to become the number two economy in the world.¹⁴⁵ History has shown that even the once-powerful Soviet Union collapsed because of its inability to adjust to the changing environment. China witnessed its counterpart disappear from the world's leadership pedestal and forced the technocrats to make strategic systematic and developmental policy reforms that adhered to the shift in the world's balance of power.¹⁴⁶

After witnessing the fall of the Soviet Union, it is difficult for a socialist system to survive unless the developing forces are identified, and there are considerable changes to the structure, institutions, and policies to counter the catalysts. Chinese leaders, especially Deng Xiaoping, understood the changing current and realized that major restructuring was necessary for the success of China's future. Understanding the consequences and the sensitivity surrounding any attempts to undermine Mao's ideology, Deng's balancing act was a mixture of a gradual approach to reform the system and experimentation of developmental policies.¹⁴⁷

Deng Xiaoping's era in China is the most influential period in China's step toward a market economy. His transformation of the PRC's ideology was the trigger that launched a broad range of economic and social reforms. Deng's economic reforms aimed at dissolution of planned economy and a return to the market economy. His success was attributed to the market reforms by placing the right technocrats in the right positions to lead the efforts. Although the majority of the old guard resisted drastic changes, Deng was able to maneuver through the politics to implement his initiatives. Deng was able to swiftly bring economic growth and raised the standard of living. His policies accelerated China's involvement and raised the status on the world's economic pedestal.

¹⁴⁵ Ibid., 70.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid., 70–71.

The Chinese reform started with identifying the weakness within the society, which was the societal gap between the rural and the urban populations. This reform was a two-phase approach that started in 1978 with changes in rural agriculture policies.¹⁴⁸ Deng concentrated on revamping both the agricultural sector and the heavy/light industries. He wanted to de-collectivize the farming land and return it to family farming in order to transition into the open market.¹⁴⁹ The government tried to mend the divide in the rural population by redistributing the state land to the population and raising the agricultural commodity prices by encouraging rural enterprises. The state relaxed many of its strict agricultural policies to give the rural population room to grow with the new initiatives.¹⁵⁰

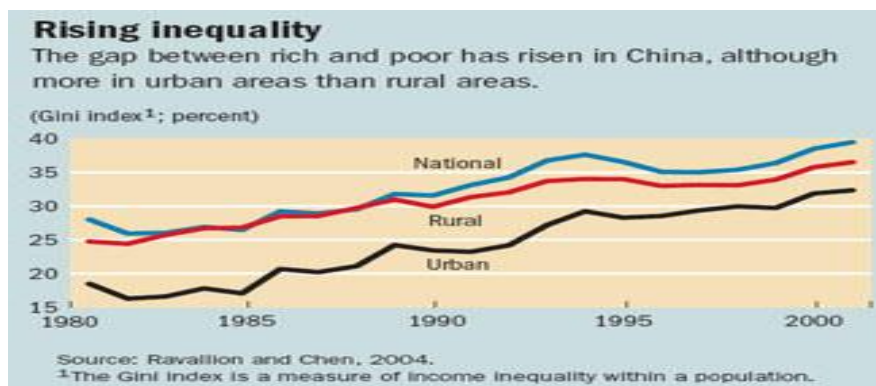


Figure 5. Rise in Inequality¹⁵¹

Next was urban reform, which started in 1984. This reform constituted transfer and apportionment of state-sponsored enterprises into the urban population.¹⁵² Many of the state enterprises were closed down, consolidated, or transferred in a major effort to reduce the portion of state-run institutions. Deng was opening China to foreign

¹⁴⁸ Wang Hui, *China's New Order* (Cambridge: Harvard University Press, 2003), 50-51.

¹⁴⁹ Ibid., 52-53.

¹⁵⁰ Ibid., 53-56.

¹⁵¹ Mike China, "Rising Inequality," last modified 2004, www.china-mike.com/facts-about-china/facts-rich-poor-inequality/.

¹⁵² Hui, *China's New Order*, 71-72.

investment and to promote international trade. The government's coastal development strategy of creating special economic zones (SEZs) in the southern part of China along the ports was a success. The SEZs had fewer restrictions, which allowed flexibility to execute in an open-market economy as well as trade with foreign countries. Many urban workers flocked to the SEZs to earn a better living.¹⁵³ The Chinese technocrats carefully devised these plans after the failures experienced in the fall of the Soviet Union and its attempt at transition.¹⁵⁴ The whole process was gradual and the technocrats were able to make adjustments along the way to steer the economy in the right direction. One of the main keys to success was the gradual phasing out from planned pricing toward market pricing. The immediate results of the market reforms were not up to par. The rural population had not yet assimilated to the market process and the rural incomes did not increase as planned originally. The urban population saw exponential growth in its wealth with individual entrepreneurship and real estate ventures. Corruption and rent-seeking behaviors were rampant. All of these issues created an unstable condition that produced collective social movements. Students demanded freedom of speech, political democracy, and establishment of rule of law.¹⁵⁵

¹⁵³ Ibid.

¹⁵⁴ Ibid., 74.

¹⁵⁵ Ibid., 74–75.

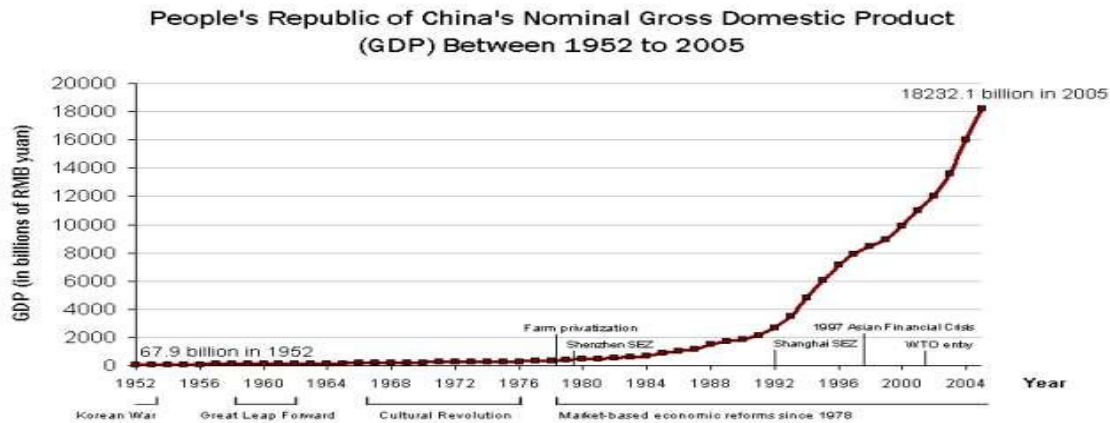


Table 3. Chinese GDP Growth (1952–2005)¹⁵⁶

In the face of the new market economy, the old ideology conflicted with the new changes. The market and social transformation went against the government's ideology and student protestors jumped on the opportunity. The government tried to subdue the social movement and find solutions to mend the differences between neo-liberalism and neo-authoritarianism. The Tiananmen Square massacre was a highly publicized incident in which Chinese students were run over by military tanks. The government decided that, to maintain legitimacy of their government, all social movements had to be stopped in order to maintain stability.¹⁵⁷ The government's economic policies resulted in social upheaval, but this upheaval gave the state more reason to flex its muscle when subduing violence. The government's creation of market pricing and neo-liberalism soon replaced the old socialist ideology. Finally, the creation of market economy symbolized the success of the social movement in the late 1980.¹⁵⁸

A. LESSONS FROM CHINA

The thought of comparing the road to China's success and that of the DPRK can be startling, but strangely there are some similarities. The leadership before Deng

¹⁵⁶ "People's Republic of China Nominal GDP Between 1952-2005," Answers.com, last modified 2005, www.answers.com/topic/deng-xiaoping.

¹⁵⁷ Hui, *China's New Order*, 58–60.

¹⁵⁸ Ibid., 63–66.

Xiaoping was similar to that of Kim Jong-un's forefathers when it comes to flawed ideologies and unsuccessful attempts at lifting their respective countries out of poverty. The inflexibility within the leadership and irresponsible economic policies led to unnecessary catastrophes in human lives. A comparison between Deng and Kim Jung-un is worthwhile. Deng was a proven and a charismatic leader who led the efforts in transitioning China away from Mao Zedong's flawed ideology. Although Kim is a young and an inexperienced leader, he has hinted at major economic overhauls to clean up the mess left behind by his predecessors. Deng's famous quote—"it does not matter whether a cat is white or black, as long as it catches mice"—is an invaluable lesson for Kim.¹⁵⁹ Kim has to use his new leadership position to change the economic policies to bring life to Deng's quote and gain the trust of the DPRK citizens. Finally, Kim has to keep pushing for economic stability and move toward modernization which will eventually bring social progress as evidenced at the Communist Party's 3rd Plenum of the 18th Central Committee.¹⁶⁰

Kim Jong-un's most daunting task is reforming the economy in the face of contradicting ideologies and opposition groups. Deng was in the same situation to uphold Mao's ideology while having to bring China into uncharted territory. Deng was quoted: "We must...set things right, shatter the shackles on thought... and seek truth from facts."¹⁶¹ He emphasized the importance of respecting his predecessor's philosophy, but at the same time urged the people to think for themselves. Deng wanted to unite his people for one cause, which was to pursue better living conditions through economic reforms. He wanted to respect the past, but at the same time move on to build a better future.¹⁶² Kim also cannot erase the history of what his grandfather and father have carved in history. Both Kim Il-Sung's and Kim Jong-il's portraits are still displayed in public, just as Mao's is mounted on the wall of Tiananmen Square even after the

¹⁵⁹ Wei-Wei Zhang, *Ideology and Economic Reform Under Deng Xiaoping: 1978–1993* (London: Kegan Paul International, 1996), 20.

¹⁶⁰ "Every Move You Make: Reform in China," *The Economist*, November 16, 2013, 14–16.

¹⁶¹ Zhang, *Ideology and Economic Reform*, 22.

¹⁶² *Ibid.*

implementation of the economic reforms. What Kim Jong-un can do at this point is to move forward with the changes for the sake of long-term stability.¹⁶³

There are interesting questions to be asked about China's unprecedented economic growth. Are there limitations to continual economic growth without a full transition to open-market economy and democracy? Can capitalism and socialism survive under one roof? The Chinese have learned an extensive lesson from the fall of the Soviet Union and clearly have made all the right maneuvers to introduce capitalism within their society.¹⁶⁴ A continued Chinese economic growth is contingent upon the Chinese government's continued efforts in reform with the proper developmental policies. Current President Xi Jinping has signaled a continued emphasis on Chinese economic development at the 3rd Plenum. Xi has hinted that market forces will have a greater role in how the technocrats will allocate their resources. Although China is not a form of democracy, it is evident from reforms made at the 3rd Plenum meeting that the Chinese leadership is gradually moving toward more liberal policies by relaxing the one-child policy and eliminating the labor camps that housed political dissidents.¹⁶⁵ China has proved that capitalism and socialism can live under one roof, but considering the tide is shifting toward more capitalistic policies, only time will tell if socialism will survive. The DPRK must understand that major economic reforms will eventually force political reforms and developmental policies that correctly reflect the capitalist system. It is crucial for the DPRK to withstand the political and social consequences in the wage of economic reforms.¹⁶⁶

B. THE DPRK'S BLUEPRINT

The keys to the DPRK's economic reform depends on how it executes in the following areas: creating institutions; emphasizing education; running the SEZs to maximum capacity; relying on comparative advantages and export; earning exchange

¹⁶³ Zhang, *Ideology and Economic Reform*, 20–22.

¹⁶⁴ "Every Move You Make: Reform in China," 14–16.

¹⁶⁵ Ibid.

¹⁶⁶ Kolodko, *From Shock to Therapy*, 71–73.

rates; providing subsidies and incentives for developing private enterprises; taking advantage of backwardness; and joining international economic organizations.

First of all, the DPRK has to understand the current economic conditions and realize where it fits in the bigger picture. According to Michael Porter, a professor at Harvard University, developing countries are tripped up by microeconomic failures.¹⁶⁷ The DPRK has certainly made horrible policy decisions that have landed it in deep waters in the past. Porter maintains that successful economic development requires progress on multiple fronts simultaneously. He stresses that reform efforts need to be tightly connected to the current stage of the country's development. Porter prescribes a stage theory of economic development. The DPRK would be considered a factor-driven economy compared with the United States' innovation-driven economy.¹⁶⁸



Figure 6. Porter's Stages of Economic Development¹⁶⁹

The DPRK has to organize a committee similar to Japan's Ministry of Economic Trade and Industry or the ROK's Economic Planning Board to organize and build viable economic policies. This type of institution would consist of technocrats and capitalists to examine the ways to develop the existing economy and how to fully utilize the physical and human capital. The committee has to determine what the country's comparative advantages are and find the right balance among heavy and light industrial and service

¹⁶⁷ Michael E. Porter, "Enhancing the Microeconomic Foundation of Prosperity: The Current Competitiveness Index," Harvard Business School, 7.

¹⁶⁸ Ibid., 8–9.

¹⁶⁹ Ibid.

sectors. The past mistakes have involved imbalance in the three sectors and total mismanagement of government spending.

Education is critical to innovative ideas. Before the Meji Restoration in 1868, only about 15 percent of the Japanese population was considered literate.¹⁷⁰ But with the development of the Meji Restoration and compulsory education in full effect, Japan became one of the world's most educated countries. Considering that both the ROK and Taiwan were colonized by Japan, the education priorities also became an important part of their priorities.¹⁷¹ The DPRK's literacy rate is currently at the top of the standings, with citizens older than 15 years of age having a literacy rate of 99 percent.¹⁷² In 1958, the DPRK instituted a seven-year compulsory education program for primary and secondary education.¹⁷³ Currently, the DPRK has a 12-year compulsory education that consists of six years of elementary school, three years of middle school, and three years of high school. All of the education is state funded. There is no doubt that the citizens of the DPRK have the capability to overcome the high learning curve, especially with the discipline that the authoritarian regime has instilled in them.¹⁷⁴

Just as China successfully experimented with the introduction of SEZs in its coastal developmental plan, the DPRK has to utilize its SEZs to their full capacity.¹⁷⁵ The DPRK government has not fully divested its efforts into SEZ improvement. The SEZs will not work like China's experience unless proper reforms and developmental policies are instituted. The DPRK cannot maintain the status quo and efficiently run its factories. The investors and laborers have to be fully incentivized to reap the total

¹⁷⁰ Andrew Brick, "Development Miracle: The Taiwan Model," www.heritage.org/research/lecture/the-asian-development-miracle-taiwan-as-model.

¹⁷¹ Ibid.

¹⁷² Sang-Hun Choe, "North Korea's Leader's Promise Improvements to Educational System," last modified September 25, 2012, www.nytimes.com/2012/09/26/world/asia/north-korean-legislature-meets-amid-speculation-about-reforms.html?_r=0.

¹⁷³ Ibid.

¹⁷⁴ Ibid.

¹⁷⁵ Suk Hi Kim, Terence Roehrig, and Bernhard Seliger, *The Survival of North Korea*, McFarland and Company, Inc., 2011, 166.

benefits of the capitalist system. If the DPRK is able to show the international community that it is serious about making changes to its policies, the market forces will naturally flood the SEZs with major investments that will benefit the DPRK's overall economy.¹⁷⁶

The DPRK has to rely on its comparative advantages to focus on export-oriented industrialization. The DPRK has a large pool of competent laborers who can learn technical and manufacturing work; the key is to provide them with training. The human capital in the DPRK is the most critical component in making economic reform successful. The human capital has to be fully utilized to maximize profitability. Transitioning from the state-run enterprise to allowing citizens to earn their share of profit will incentivize citizens to work harder. The DPRK's low-cost labor can produce international products along with natural resources that can be dominant sources of its competitive advantage. The DPRK should concentrate on producing commodities or relatively simple products designed in more advanced countries because its technological level is not up to par. The country should concentrate its companies having a limited role in the value chain and focus strictly on assembly, labor-intensive manufacturing, and resource extractions. Most of the technology should be assimilated through imports, foreign direct investments, and imitations. The international community will flock to the DPRK for investments. The DPRK will have low-wage laborers that producers yearn for because labor costs are rising in China. Once markets such as China dry up, corporations will want to move their plants where it is more enticing, such as to the DPRK.

The DPRK has to earn the exchange rate of its currency. The DPRK tried to revalue its currency system in the past, but met total failure.¹⁷⁷ Having a sound and stable currency will raise consumer confidence and draw investors to the market. If the government can set up a stable exchange rate, it can fight inflation at the same time. The government has to decide to decrease government expenditure from the total GDP. Currently, the DPRK is spending 30.3 percent of its GDP on the military.¹⁷⁸ If

¹⁷⁶ Kim, Roehrig, and Seliger, *The Survival of North Korea*, 167–171.

¹⁷⁷ Lankov, *The Real North Korea*, 126–127.

¹⁷⁸ Lankov, *The Real North Korea*, 128.

government can channel some of the military funding to other sectors, that would improve the balance sheet. The international community will also demand that the DPRK reduce its military expenditures as a condition of receiving loans. The ROK, during its economic rise, kept its interest rates intentionally low to make its currency cheaper for borrowing and deflated its exchange rate so that its products were cheaper in the international market, making its companies more competitive.¹⁷⁹

The government has to provide incentives and subsidization to private companies to encourage trade by both importing and exporting.¹⁸⁰ The DPRK will have to pick the winners in certain industries while providing losers with subsidies to soften the blow. Public and private cooperation is very important to the success of the system. There has to be transparency and flexibility between the two groups to make any adjustments along the way. These incentives and rules will help transition the DPRK from an illicit economy to a formal economy.¹⁸¹

The DPRK has advantages because of its backwardness. It can receive technology transfers and receive assistance from international academia. The DPRK has the capability to leapfrog in areas such as technology by reverse engineering and producing imitations. As evidenced in the DPRK's ability to spread viruses in U.S. networks, the DPRK does have developers that are technologically savvy, proving science fields are more advanced than previously estimated.¹⁸²

Before China's initiative to open relations with the United States, it was considered outcast by the rest of the international community.¹⁸³ Deng's economic reforms meant opening up trade to foreign entities. It was important for China to receive accession and participate in trade associations such as the World Trade Organizations

¹⁷⁹ Ibid., 130–131.

¹⁸⁰ Jene L. Kwon, *Korean Economic Development* (Westport: Greenwood Press, 1990), 3.

¹⁸¹ Ibid., 4–6.

¹⁸² Alexander Gerschenkron, *Economic Backwardness in Historical Perspective* (Cambridge: Harvard University Press, 1962), 212–214.

¹⁸³ Carlos A. Magarinos, Long Yongtu, and Francisco C. Sercovich, *China in the WTO: The Birth of a New Catching-Up Strategy* (Hampshire: Palgrave Macmillan, 2002), 1–4.

(WTO). The WTO accepted China's request to join the organization on December 11, 2001, making it the 143rd member of the trade organization.¹⁸⁴ This accomplishment gave China the opportunities to expand the trade and to protect its interests. The DPRK's road to economic reform means that the state will have to interact with international trade partners. The WTO might be a long-term goal, but the DPRK can, in the short-term, participate in regional trade organizations such as the Pacific Partnership Free Trade Agreement. Currently, there are 11 Asian countries along with the United States participating in the organization.¹⁸⁵ The Asian countries should also give favorable trade status to the DPRK to provide opportunities for the fragile economy to develop. Cheap labor with value added and efficient productivity will naturally force other countries to explore the DPRK's potential.¹⁸⁶

The road to China's success came at a steep price, with millions of peasants dying as a result of inefficient policies, but with the changing of guard brought out-of-the-box thinking that has made China a force to be reckoned with. The DPRK is at the stage where Kim Jong-il has relinquished the guard to his son, Kim Jong-un. Just as China experienced millions of casualties resulting from inefficient policies, the DPRK too implemented major policy blunders in the past. Kim Jong-un has a proven template and roadmap to success in his hands. Now, will he bring to DPRK the same trial and tribulation that China has experienced within the past three decades?

¹⁸⁴ Ibid., 2–3

¹⁸⁵ Ibid.

¹⁸⁶ Ibid., 4.

V. THE DPRK'S POTENTIAL

Historically, many analysts have predicted that the collapse of the Kim regime was inevitable, but they have all fallen short of their forecasts. The Kim dynasty has been in existence for more than 60 years, unlike its socialist brethren who have collapsed along the way. According to Bruce Cumings, the DPRK's leadership is very rational and its ability to survive should not be underestimated.¹⁸⁷ The regime has the potential to succeed in major economic reforms because of the recent leadership change, advancement in nuclear technology, existing SEZs, national interests of China, the DPRK's promising natural resources, and the comparative advantage of human capital.

A. LEADERSHIP CHANGE

The DPRK's leadership transition is a signal of much change to come in the near future and an opportunity for Kim Jong-un to take the DPRK to the forefront of major economic development. There are signs that Kim will implement major changes to the infrastructure, technology, and trade with socioeconomic reforms. Most importantly, a leadership change means that there is a fresh set of eyes and a view that will break the conundrum that has considerably affected the DPRK's economic standing. As mentioned previously, that DPRK elites were granted usage of cell phones and that the DPRK approved Internet access to foreign visitors shows the progress being made, with even the chairman of Google becoming involved.¹⁸⁸

B. ADVANCEMENT IN NUCLEAR TECHNOLOGY

The DPRK's advancement in nuclear capabilities will add value to the regime's legitimacy and survival. Former U.S. Secretary of Defense Robert Gates estimated in 2011 that the DPRK is about five years away from having the capability to manufacture a

¹⁸⁷ Bruce Cumings, "Why Did So Many Influential Americans Think North Korea Would Collapse?" (London: McFarland, 2011), 44–46.

¹⁸⁸ "North Korea will Allow Mobile Internet Access From March 1," *NK News*, last modified February 22, 2013, www.nknews.org/2013/02/north-korea-will-allow-mobile-internet-from-march-1/.

small warhead capable of fitting within its payload.¹⁸⁹ According to Andrei Lankov, the DPRK has used the nuclear weapons program as a bargaining chip to muscle its way into receiving international aid.¹⁹⁰ It has a higher probability of completing its nuclear capabilities, if they are not completed already, which will result in more legitimacy for the government and more ways to reap financial gains from the international community. In the past, the regime was able to survive because it was masterful in negotiating its way into gaining massive economic packages to stave off near collapses.¹⁹¹ The nuclear weapons card plays nicely into the DPRK's ever-so-slightly-changing ideologies. With recent developments of the Iran nuclear deal, it gives hope for the international community to take major steps in changing the direction of the DPRK's downward spiral. The sooner the nuclear capability is acknowledged by the international community, the sooner the economic reforms can be implemented. Kim Jung-un will be able to use the DPRK's nuclear technology, hopefully with positive intentions, to help with the socioeconomic reforms by soliciting legitimate financial loans to jumpstart the DPRK's economic policy implementation.¹⁹²

C. SPECIAL ECONOMIC ZONES

The DPRK has mobilized SEZs in the past, starting with the Rason SEZ near the Russian border in 1991.¹⁹³ The Sinuiju Special Administrative Region, led by a former Chinese governor named Yang Bin, started in 2002 near the Chinese border.¹⁹⁴ Both of the Rason and Sinuiju SEZs resulted in failure because of lack of support and coordination between the Chinese and the DPRK governments. Much-needed

¹⁸⁹ "North Korea's Nuclear Program," *New York Times*, February 27, 2013, http://topics.nytimes.com/top/news/international/countriesandterritories/northkorea/nuclear_program/index.html.

¹⁹⁰ Lankov, *The Real North Korea*, 146.

¹⁹¹ *Ibid.*

¹⁹² *Ibid.*, 147–149.

¹⁹³ Lankov, "North Korea-China Special Economic Zone," *East Asia Forum*. July 14, 2011, www.eastasiaforum.org/2011/07/14/north-korea-china-special-economic-zones/; Lankov, *The Real North Korea*, 170–172.

¹⁹⁴ *Ibid.*

infrastructure projects and roads were never built. Both establishments had positive starts with ambitious goals, but their management failed to follow through with implementation goals. Chinese operatives wanted to establish gambling facilities within the zones, but were denied by the Chinese government.¹⁹⁵

The DPRK lacked proper management of past attempts, but there are some positive outcomes on other SEZ ventures associated with the ROK. Economic zones such as Gaesung Industrial Complex as a special industrial district and the Mount Kumgang Zone as a special tourism zone where the Hyundai business group spent \$942 million for tourism have not been enough to revive the economy, but are good initiatives.¹⁹⁶ The DPRK still has an opportunity to capitalize on the SEZs with economic policy changes. The concept is on the right track, but the DPRK requires the right type of management to bring success to these investments. Most important, the success of one or a combination of these SEZs can prove to the international community that the DPRK is serious about transforming its fragile economy and interconnecting its economic potential to the international community.¹⁹⁷

D. HUMAN CAPITAL

The DPRK has the fourth largest military in the world.¹⁹⁸ It prides itself on 1.2 million active duty troops and approximately 4.7 million reserve troops.¹⁹⁹ The DPRK spent more than 25 percent of its GDP on defense, which is an enormous scale even compared with the tier-one countries.²⁰⁰ Within the 100-km confines of its demilitarized zone, the DPRK has positioned 65 percent of its military units and 80 percent of its

¹⁹⁵ Lankov, “North Korea-China Special Economic Zone,” 172.

¹⁹⁶ Sung-Hoon Lim, “Rethinking Special Economic Zones as a Survival Strategy for North Korea,” in Suk Hi Kim, Terence Roehrig, and Bernhard Seliger, eds., *The Survival of North Korea: Essays on Strategy, Economics and International Relations* (London: McFarland, 2011), 160–165.

¹⁹⁷ Nicholas Eberstadt, *The North Korean Economy: Between Crisis and Catastrophe* (Washington, DC: AEI Press, 2009), 223; Lankov, *The Real North Korea*, 170–172.

¹⁹⁸ Andrew Scobell, *North Korea's Military Threat* (Carlisle, PA: United States Army War College Press, 2007), 1, www.strategicstudiesinstitute.army.mil/pdffiles/pub771.pdf.

¹⁹⁹ Ibid.

²⁰⁰ Ibid.

aggregate firepower to the front line.²⁰¹ With 700,000 troops and 8,000 artillery systems forward-deployed, the North can strike Seoul in minutes of Kim Jong-un's orders.²⁰² The Kim Jong-il regime has always preached a military-first attitude to deter any form of aggression from the ROK and its allies, but there are some signs that Kim Jong-un is shifting the balance of power toward the military from the Worker's Party with the recent execution of his uncle, Jang Song-thaek. If Kim shows signs of making drastic reform changes, he will have to shift the emphasis and redistribute the funding away from the military to offset the cost of reform policies. With the massive number of personnel in the military, Kim should rebalance the human capital to align with the renewed economic portfolio.²⁰³

The sure size of the workforce also provides a competitive labor rate for foreign companies. The Gaesung Industrial Complex is an inter-Korean operated economic zone that was opened in 2004.²⁰⁴ The complex provides income for 40,000 DPRK employees, and interviews have suggested that the laborers are hard-working, well educated, and have potential to increase production in the future.²⁰⁵ The major incentive for foreign companies is the labor. The employees at the Gaesung Industrial Complex earn \$73 per month; the workers net about \$40, with the remaining balance going toward taxes and social contributions.²⁰⁶ The workers are more likely to take the hard currency because of the instability of the DPRK's currency with its high inflation.

E. NATURAL RESOURCES

The DPRK's major potential comes from its natural resources. If the DPRK is able to efficiently manage its mineral assets and convert it to financial gains, it can mean substantial income for the state's budget. According to Goldman Sachs research, the

²⁰¹ Scobell, *North Korea's Military Threat*, 1.

²⁰² Ibid.

²⁰³ Ibid.

²⁰⁴ Kwon, "A United Korea," 12.

²⁰⁵ Ibid.

²⁰⁶ Ibid.

DPRK has “large potential deposits of minerals including magnesite, coals, uranium, and iron ore, valued at around 140 times the DPRK’s 2008 GDP at current market prices.”²⁰⁷ The research indicates that the net present value of the mineral resources is 18 times that of its GDP.²⁰⁸

North Korea is Rich (and South Korea is Poor) in Minerals					
Resources		North Korea Reserves Value (KRW tm)		South Korea Reserves Import %	
Magnesite	bn ton	6.0	1,376	-	100
Limestone	bn ton	100	996	10	1
Uranium ore	000 ton	4,000	628	-	100
Lignite	bn ton	16	343	-	100
Anthracite coal	bn ton	4.5	257	1.4	65
Iron	bn ton	5.0	214	0.02	99
Gold	000 ton	2	45.3	0.04	93
Zinc	000 ton	21,000	12.6	588	100
Lead	000 ton	10,600	9.12	404	100
Copper	000 ton	2,900	5.41	56	100
Silver	000 ton	3-5	1.86	1.58	95
Molybdenum	000 ton	54	1.13	22	99
Rosette graphite	000 ton	2,000	0.75	121	100
Tungstentrioxid	000 ton	246	0.39	127	89
Barite	000 ton	2,100	0.22	842	100
Fluorspar	000 ton	500	0.08	477	100
Talcum	000 ton	700	0.06	8,152	92
Kaolinite	000 ton	2,000	0.03	106,335	11
Manganese	000 ton	100-300	0.01	176	100
Nickel	000 ton	10-20	0.00	-	100
Asbestos	000 ton	13	0.00	511	-
Total (times 2008 GDP)		142			

Note: Reserves for South Korea are the sum of confirmed and estimated reserves as of 2007. North Korean data are potential reserves, based on information from North Korea, The Institute for National Unification, Hyundai IAEA, EIA, and GS Global ECS Research.

Table 4. Comparison of Mineral Resources²⁰⁹

The ROK currently imports 97 percent of its mineral resources, and the DPRK holds six of the major mineral sources that the ROK imports, which can be seen as beneficial to the DPRK with future trade agreements.²¹⁰

²⁰⁷ Kwon, “A United Korea,” 10.

²⁰⁸ Ibid.

²⁰⁹ Ibid.

²¹⁰ Ibid.

F. CHINA'S INTEREST

China supports the DPRK's longevity for political and economic reasons. According to Victor Cha, China as an up and coming global hegemon wants to make sure that the U.S. circle of influence does not border its state.²¹¹ It is quite convenient to have the DPRK as a buffer zone to distance itself from U.S. influence. At the same time, China does not want a flood of refugees coming across its border in the case of a collapsed regime. China is currently the DPRK's leading trade partner and is able to take advantage of low-cost labor, along with favorable trade access to the DPRK's mineral deposits.²¹² It is in China's best interest to keep DPRK float with the current situation as long as possible. China's protectionist attitude toward the DPRK and reluctance to publicly denounce its neighbor definitely supports why the DPRK is strategically important to China.²¹³

G. IMPROVED SOCIETY

There are some signs of improvement in standard of living in some parts of the DPRK. Some economists feel that the socioeconomic reforms implemented by Kim Jong-il in the latter 1990s are coming into fruition.²¹⁴ The construction industry is booming, with evidence of buildings being renovated and streets being repaved. There are noticeable increases in vehicle traffic on the streets and increased accidents. The large district markets have expanded from 38 and are projected to increase to 42 beyond 2014.²¹⁵ There are increases in open-market activities, with currency traders even exchanging U.S. dollars and Chinese Yuan, and Japanese yen. Many restaurants, beer bars, and small cafes have opened to accommodate the citizens in Pyongyang. The general public can enjoy ski resorts, amusement parks, theaters, and shopping malls.

²¹¹ Cha, *The Impossible State*, 125.

²¹² Lankov, *The Real North Korea*, 180–81.

²¹³ *Ibid.*, 183.

²¹⁴ Young Whan Kihl and Hong Nack Kim, *North Korea: The Politics of Regime Survival* (New York: M.E. Sharpe, 2006), 37–38.

²¹⁵ *Ibid.*

Finally, the bustling life even accommodates gambling and prostitution (in the background).²¹⁶ The picture that has been depicted is considerably different in the rural areas, but only time will tell if future economic reforms can help to extend the amenities in life to rural areas.

H. CURTAILING CORRUPTION/ILLICIT ACTIVITIES IS NECESSARY

The DPRK's potential for economic reform success hinges upon the government's concurrent effort in implementing sweeping policies to curtail corruption. There is rampant and blatant political corruption within the DPRK. The DPRK is trying to find every financial avenue to stay afloat, whereas the UN is pressing heavy sanctions to choke the DPRK's ability to finance its nuclear ambitions. According to the Transparency International's 2012 Corruption Perceptions Index, the DPRK ranked first, tied with Somalia and Afghanistan as the world's most corrupt nation.²¹⁷

The DPRK is known for its illegal activities in drug trafficking, foreign arms sales, insurance fraud, and counterfeiting. The DPRK is the world's worst offender in counterfeiting \$100 bills.²¹⁸ The DPRK had stolen the same printing press that U.S. Treasury used in Germany during the fall of the Berlin Wall. The \$100 bills can be only detected by high-tech devices from the U.S. Federal Reserve.²¹⁹ The DPRK also imports the same ink that U.S. imports from Switzerland. The north is flooding the market with about \$400 to \$500 million in U.S. currency.²²⁰ Pyongyang's Korea National Insurance Commission has played a large role in insurance scams; for instance, making fraudulent claims about weather damage to ships and aircrafts.²²¹ The fraudulent claims netted were sent to Kim Jong-il and his insiders to spend on luxury goods and pleasure. The U.S.

²¹⁶ Kihl and Kim, *North Korea*, 39.

²¹⁷ "Corruption Perception Index," *Transparency International* 2012, accessed March 12, 2014, <http://cpi.transparency.org/cpi2012/results/>.

²¹⁸ David Wolman, "How the U.S. cCan Pressure North Korea Tomorrow," *Time*, February 24, 2012, <http://business.time.com/2012/02/24/how-the-u-s-could-pressure-north-korea-tomorrow-quit-the-100-bill/>.

²¹⁹ *Ibid.*

²²⁰ *Ibid.*

²²¹ *Ibid.*

Treasury has estimated that the DPRK makes approximately \$200 million on drug trafficking.²²² The inner circle is lavishing in luxury goods while more than half of the country is going through one of the worst famines in history. The north caters toward the few upper privilege citizens that have influence while using coercion on rest of the public to maintain stability.

DPRK officials are, however, cracking down on black market goods and defection. According to *The Economist*, the number of defections has dropped to 1,509 (or a 44 percent decrease).²²³ The survival of the regime is in jeopardy if enough DPRK citizens understand there is a better life outside of the DPRK—the curiosity factor might lead to the demise of the regime.²²⁴ It is in the DPRK's best interest to make sure that outside merchandise is kept to a minimum to eliminate any curiosity among the people. If the DPRK does not reform its economy to follow the pace in which its citizens are attuning to the trends and news of outside society, there is a higher chance of revolt from the citizens.

There is also an efficient system of transferring foreign currency into the DPRK. Brokers from China help to deliver remittances to each of the recipients.²²⁵ Even the defectors that are residing in the ROK are able to send remittances to some of their family members by paying off officials. It is ironic that the DPRK allows this, but it is one way to generate revenue and allow the flow of foreign currency into the financial system.²²⁶ A recent article from the *China Morning Post* suggests that the DPRK is using cash couriers and false aliases to maneuver around UN-mandated sanctions to fund its regime's appetite.²²⁷ DPRK defector Kim Kwang Jin worked for North Korea's state insurance company and witnessed the covert avenues that the DPRK used to avoid from any

²²² Wolman, "How the U.S. Can Pressure North Korea Tomorrow," 1.

²²³ Henry Tricks, "Rumblings from Below," *The Economist*, February 9, 2013.

²²⁴ Ibid., 26.

²²⁵ Ibid.

²²⁶ Ibid.

²²⁷ "North Korea Uses Cash Couriers, False Names to Outwit Sanctions," *China Morning Post*, February 18, 2013, 1, www.scmp.com/news/asia/article/1153002/north-korea-uses-cash-couriers-false-names-outwit-sanctions.

restrictions imposed on them. Kim Kwang Jin was quoted as saying, “I stuffed \$20M into two suitcases one day and sent it to Pyongyang as a special gift for then leader Kim Jong-il.”²²⁸ The DPRK has been sanctioned since the 1950s, but time after time, it has been able to outwit the United States and the UN in meeting its objectives. The UN was once successful in seizing the DPRK’s asset of \$25 million from Macau-based Banco Delta Asia. The United States later released the \$25 million back to the north after its promise to ease its nuclear ambitions.²²⁹ The north has learned many lessons from that \$25 million seizure, such as to hide the cash in small amounts and in different accounts, so that it is not dependent on the money if one of the accounts is seized. The DPRK has used diplomats to transport cash. According to ROK government sources, it is very difficult to detect the cash flow of DPRK assets. With simple ways to change aliases, and China not supporting ship inspections, the DPRK will keep laundering illegal cash to fund its illegal activities. If the United States or the UN ever hinders the DPRK’s attempts, the DPRK will dig deeper to finding other means to meet its objectives.²³⁰

The government is able to survive because the rule of law is enforced in the state. The rampant corruption can disrupt any major efforts at economic reform because these two entities cannot survive together. Investment capital will be important to implement the policies, and those assets can only be derived from the international community only if the DPRK government enforces the rule of law to rid of corruption within the ranks. Corruption reform has to start from the top down. It is impossible to fully get rid of corruption; therefore, a gradual approach with realistic metrics should be considered.

The DPRK possesses the pedigree to become a successful developmental state with potential internal strengths and with external financial and technical support. The key is for the leadership to understand its comparative advantages and to fully maximize its potential with the right economic reform policies. Although the DPRK has a long road ahead, efficient and precise decision-making will help catapult its dampened economy

228 “North Korea Uses Cash Couriers,” *China Morning*, 1.

229 Ibid.

230 Ibid.

through the roof. It is also important to realize that corruption and economic reform policies do not mesh. A dual-track effort to reduce corruption will be vital in stabilizing and reassuring future investors of their investments.

VI. CONCLUSION

The DPRK is in a speculative state in which the regime can unfold into either end of the spectrum at any moment. It is quite a phenomenon for a country such as the DPRK to have survived thus far with its belligerent behavior and its ambitions to bring a nuclear program into fruition. How did the DPRK survive this long and why did the international community let the current scenario come to be? Victor Cha, in *The Impossible State*, cites the DPRK's large military structure, the border with China, and the U.S. priorities on the war on terrorism as the main drivers in creating the current scenario.²³¹ So, is the DPRK's existence purely a fluke because it was lucky to share a border with China, who has a vested interest that the DPRK remains status quo? Did Al-Qaeda's leadership save the DPRK by swaying the attention of the United States to a war on terrorism? These are important questions to ponder when determining what are at stake for the DPRK in the near future in combination with proposed economic policy reforms.

A. INTERNATIONAL COMMUNITY INFLUENCE

The days of Six-Party Talks are over; there have not been any productive discussions since 2008. Both the DPRK and the ROK engaged in bilateral agreements with summits in 2000 and 2007.²³² The engagement policy had positive starts, but did not result in any meaningful progress. The DPRK has not kept up with its part of the agreement in most cases. Last, the George W. Bush administration's hard-lined stance led to more of a relationship strain, which resulted in the test of nuclear weapons in 2006, 2009, and 2012.²³³

The past participants of the Six-Party Talks have other priorities on their national agendas that will deter them from going against the status quo. Nevertheless, the participants do realize the breaking point in which they would have to get involved to

²³¹ Cha, *The Impossible State*, 427–430.

²³² Suk Hi Kim, "North Korea: Yesterday, Today, and Tomorrow," in *The Survival of North Korea* (London: McFarland 2011), 24–25.

²³³ Ibid.

restrain the DPRK's desire to completely disrupt the international and Northeast Asia order. The key is to act before it is too late. The DPRK's nuclear advancement is one key parameter to watch because completion of nuclear technology could change the terms of future negotiations.

Andrei Lankov proposes the idea of international student exchange to give the DPRK a different perspective in politics, economy, and social ideologies of different states.²³⁴ Realistically, the DPRK would not send a contingent to the United States because it goes against its ideology, but the United States can work with international partners in holding exchanges among its allies. Lankov cites that the old Soviet regime partnered with the United States in sending four delegates on a one-year student exchange program to Columbia University.²³⁵ Two of the four students ended up being spy agency operatives, but the other two ended up being government elites who help to topple the communist regime.²³⁶

The ROK has the most to lose if the DPRK regime implodes. The estimated cost for the ROK to absorb the DPRK ranges from \$0.2 trillion to \$5 trillion.²³⁷ Polls suggest that the majority of ROK citizens are proponents of a reunification in the future, however, economically, it would be in their best interests to provide partial support in the means of food donation and administrating SEZs such as the Kaesong Industrial Complex. Although the ROK's current administration of President Park Geun-hye warns any initiation in armed conflict would result in retaliation from the ROK military, it still provides aid in the form of grain and trade benefits to its neighbor.²³⁸ The ROK would welcome the idea of an economic reform to bring legitimacy to the DPRK government, not only because it would be a path for the DPRK to become a law-abiding neighbor, but also it just makes political and economic sense to provide financial aid.

²³⁴ Lankov, *The Real North Korea*, 217–219.

²³⁵ Ibid.

²³⁶ Ibid.

²³⁷ Ibid., 235–237.

²³⁸ Ibid.

Although, the U.S. has already been down the road of providing financial assistance to the DPRK, it would still maintain the current policy if the DPRK proposes to stop its tyrannical behavior. The current U.S. policy change in pivoting to the Pacific will mean dealing head to head with China's rising political and economic power. The U.S. would welcome a positive change by the DPRK because that has the possibility of bringing the DPRK buffer zone just that much closer to the ROK.

B. FINDINGS

Many successful states in history have implemented and emulated productive economic models. Both the ROK and Taiwan blossomed into economic powerhouses by implementing and emulating Japan's successful economic model. Not all the models are created equal, however. Just because one model was successful does not mean that any state that follows that model will eventually become prosperous. The logic is to find the most similar model compared with the DPRK's current standing and predict the results based on the high probability of the ROK's and Taiwan's past and current successes. The other twist to the DPRK's potential economic reform policy is how to deal with the non-elites in transitioning into a market economy that goes against their founding values and ideology. This is where China's model comes into play. The irony of China's economic success is how it was able to transition from a socialistic ideology into a market-driven economy with few bumps along the road. The Chinese politburo was able to implement changes to its policies in a gradual fashion to push its way through obstacles. The longer the DPRK keeps its current policies, the more difficult it will be to come out of the dark hole, but China's model gives hope for the DPRK to slowly transition into a market-driven economy and maintain order among the non-elites.

Whether or not the DPRK decides to implement major economic policy changes is unclear. What is known is that the DPRK has the realistic potential to succeed if it decides to fully engage in the pursuit of economic growth. First, the new leadership is motivated to bring positive changes to the state in terms of economic reform. Second, advancement in nuclear technology will help the DPRK to write its own terms, whereas any negotiation goes with the international community in the event that the DPRK

foregoes is nuclear program in exchange for financial support. Third, SEZs can result in successful ventures if the DPRK decides to appoint expert management in guiding the existing SEZs in the right direction. Fourth, China will likely support most ventures of the DPRK, including economic reforms that will maintain the DPRK's existence on the border of China. Fifth, the DPRK's abundance of natural resources will place the state in a great position to trade with the international community with great terms. Last, the DPRK has to utilize its comparative advantage in human capital to the maximum extent to fully capture its true potential.

C. WHAT THE FUTURE HOLDS

The DPRK's weak spot, which can jeopardize its existence in the near future, is its childlike behavior. In the past, the DPRK has fueled international communities' anger with acts of terrorism that defied logic. For example, in retaliation to the ROK for holding the 1988 Summer Olympics in Seoul, the DPRK set off a bomb in 1987 on a Korean Air Flight, 858 killing 115 people.²³⁹ The DPRK also fired a torpedo, sinking the *Cheonan* and killing 46 ROK sailors. Investigators found parts of the torpedo showing clear evidence that the DPRK was involved with the tragedy.²⁴⁰ Finally, in November 2010, the DPRK fired more than 100 artillery shells at the Yeonpyeong Islands, killing two and wounding 13. The ROK only retaliated with 80 rounds of warning fire and dispatched its fighter jets.²⁴¹ The ROK public was not satisfied with the government's response to the unprovoked attacks. Some of these efforts were to prop up Kim Jung-un's legitimacy as the incoming leader. Up to now, the ROK has been very patient by not retaliating with vengeance. A concern would be that the ultraconservative president (Park Geun-hye) and the ROK citizens are at the end of their patience; one major act of

²³⁹ Susan Chira, "Korean Plane, 115 Board, Crashes in Southeast Asia," *New York Times*, November 30, 1987, <http://www.nytimes.com/1987/11/30/world/korean-plane-115-aboard-crashes-in-southeast-asia.html>.

²⁴⁰ "North Korean Torpedo Sank South's Navy Ship," BBC News, May 20, 2010, www.bbc.co.uk/news/10129703.

²⁴¹ Michael Sheridan, "North Korea Bombs South Korea's Yeonpyeong Island," *Daily News*, November 23, 2010, www.nydailynews.com/news/world/north-korea-bombs-south-korea-yeonpyeong-island-2-dead-13-wounded-attack-report-article-1.455770.

terrorism against the ROK could ignite a catastrophic event. At that point, the DPRK would lose even the trust of China, which is the DPRK's number one source of economic assistance. The recent heightened tension in early 2013 has died down and it would be in the DPRK's best interest for long-term survivability to refrain from acts of terrorism. But it does not preclude the DPRK from advancing its nuclear capability and backing away from future negotiation deals, which are minor infractions in the eyes of the international community compared with acts of terrorism.

The recent assassination of the number two (Jang Song-taek) head of the DPRK throws a twist into the proposed economic policy reforms. Kim Jong-un's ascendancy to power has shifted from prior arrangements made by his father. For the past two years, Kim Jong-un has shifted power from the military to the Worker's Party with the power of Jang, who had helped to purge military elites during Kim's transition.²⁴² Jang had been Kim's mentor and had supported the economic reforms with his ties to China. Now, with Kim in full power by eliminating his right-hand man, the power has shifted back to the military.²⁴³ The future of economic policy reforms are still possible, but have hit a roadblock with the execution of Kim's uncle.

All in all, the DPRK controls its destiny. It will stumble through the next 15 to 20 years, as proven by its existence through the past 60 years of trials and tribulations. As long as it maintains the same mixture of ideology and adds economic reforms, the international community will support the DPRK's existence because of self-motivated interests. It is vital that the DPRK does not test the ROK's patience because one wrong move could set off a time bomb—that time bomb could eventually wipe away all of the DPRK's gains because the ROK will have the support of the United States and eventually the Chinese over any unprovoked military actions.

²⁴² Jethro Mullen, "North Korea's Kim lauds the purge of executed uncle Jang Song Thaek," CNN, January 1 2014, <http://www.cnn.com/2013/12/31/world/asia/north-korea-kim-jong-un-speech/index.html>.

²⁴³ Ibid.

D. FINAL THOUGHTS

This research about the DPRK has been a fascinating experience. The DPRK is not like any other country. The regime has placed itself in a situation where there are very few options to ever return to a legitimate state. I am in no situation to be able to predict what will happen to the DPRK, but I can base my opinion on several assumptions and empirical evidence in which path the DPRK can likely end up based on certain policy changes. The regime stability is anyone's guess, especially with the recent execution of the second highest ranking official in the DPRK. If the regime desires to exercise those few options on its way to becoming a legitimate state, I would hope the policy changes result in success for the sake of the non-elites within the state who have suffered the most from the political motives of the Kim regime. Last, the initial phase of the Iranian nuclear deal with the international community gives me hope that the DPRK will follow in the Iranian footsteps in dismantling its nuclear program once and for all and welcome international economic support to the road to becoming a legitimate state.

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